# METEOROLOGICAL OBSERVATIONS

MADE AT THE

# GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

# ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

# MONTH OF JANUARY, 1872;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

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# METEOROLOGICAL OBSERVATIONS.

## GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s

Magnetic Variation 9° 32′ 41″ East.

## JANUARY, 1872.

### GENERAL ABSTRACT.

| | | | |
|---|---|---|---|
| **BAROMETER** .. At 32° Fah. | Highest Reading ... | 30·270 | ... On the 4th, at 8 a.m., and 5th, at 9 and 10 a.m. |
| | Lowest Reading ... | 29·430 | ... On the 22nd, at 4 p.m. |
| | Mean Height ... | 29·851 | |

(Being 0·089 in. greater than that in the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **WIND** .. .. | Greatest Pressure... | 14·0 lbs. | ... On the 17th |
| | Mean Pressure ... | 0·7 lbs. | |
| | Number of Days Calm ... | 0 | |
| | Prevailing Direction | E.N.E. | |

(Prevailing direction during the same month for the preceding 13 years ... N.E.)

| | | | |
|---|---|---|---|
| **TEMPERATURE** | Highest in the Shade ... | 98·3 | ... On the 17th. |
| | Lowest in the Shade ... | 58·9 | ... On the 5th. |
| | Greatest Range ... ... | 27·4 | ... On the 17th. |
| | Highest in the Sun ... | 136·0 | ... On the 17th. |
| | Highest in a Black Box with Glass Top ... ... | 204·0 | ... On the 17th. |
| | Lowest on the Grass ... | 53·1 | ... On the 4th. |
| | Mean Diurnal Range ... | 12·8 | |
| | Mean in the Shade ... | 73·2 | |

(Being 2·3 greater than that of the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **HUMIDITY** .. | Greatest Amount... ... | 100· | ... On the 12th and 13th. |
| | Least ... ... ... | 49· | ... On the 17th. |
| | Mean ... ... ... | 78· | |

(Being 5·8 greater than that of the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **RAIN** .. .. | Greatest Fall ... ... | 2·800 inches. | On the 13th. |
| | Number of Days ... ... | 15 | |
| | Total Fall ... ... | 3·643 inches. | 65 ft. above the ground. |
| | | 5·046 inches. | 15 inches above the ground. |

(Being 0·950 inches greater than that of the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **EVAPORATION** | Total Amount ... ... | 5·545 inches. | |
| **OZONE** .. .. | Mean Amount ... ... | 3·7 | |

(Being 0·6 less than that in the same month on an average of the preceding 12 years.)

| | | |
|---|---|---|
| **ELECTRICITY** .. | Number of Days Lightning | 5 |
| **CLOUDY SKY** .. | Mean Amount ... ... | 7·1 |
| | Number of Clear Days ... | 1 |
| **METEORS** .. | Number Observed ... | 2 |

### REMARKS.

The weather during the month was remarkably hot and oppressive, the temperature being 2·03 greater and the humidity 5·8 greater than the average of the past 13 years, and 1·1 higher than the greatest in any previous January of that period; hence vegetation has been very active, almost tropical. Rain was abundant over the Colony, except Urana, Deniliquin, and Albury. Hot winds were recorded on the 11th, 16th, 17th, 18th, 21st and 31st, and the max. temperature was over 100° at eleven Stations, the highest being 115·1 at Deniliquin.

60 thunderstorms were recorded during the month, and a smart shock of earthquake at 11·30 p.m. of the 3rd; at Bombala, Kiandra and Cooma, and Beechworth (Victoria), it lasted about 30 seconds.

On the 4th at 7·50 p.m., a fine aurora was visible for 20 minutes at Macleay River, colour at first fire red, then yellow, and finally red, when it disappeared.

## SYDNEY, JANUARY, 1872.

| Date. | Moon's Phases. | Standard Barometer at 9 a.m., corrected to Mean Sea Level. | Wind. | | Temperature. | | | | | | | | | Humidity. 0–100. | Rain. Inches. | Cl'dy Sky. 0–10. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Dry. | Wet. | Shade. | | | | Sun. | Grass. | Sea Water. 9 a.m. | | | |
| | | | Prevailing Direction. | Total Velocity. Miles. | Mean 9.3.9. | Mean 9.3.9. | Max. | Min. | Range | Mean. | Max. | Min. | | Mean 9.3.9. | | |
| 1 | | 30·008 | N.E. | 158 | 67·4 | 65·8 | 75·3 | 64·3 | 11·0 | 69·8 | 113·0 | 62·1 | 71·4 | 90·0 | 0·518 | 8·5 |
| 2 | | 29·765 | S. | 449 | 74·9 | 70·1 | 82·5 | 65·9 | 16·6 | 74·2 | 121·6 | 63·1 | 71·6 | 77·3 | ·0 | 7·0 |
| 3 | | 30·025 | S.S.E. | 338 | 64·2 | 55·4 | 70·9 | 60·1 | 10·8 | 65·5 | 116·9 | 57·6 | 71·4 | 55·7 | 0·082 | 9·7 |
| 4 | In Equat. Last Qr. | ·218 | N.E. | 240 | 68·9 | 59·9 | 73·1 | 59·1 | 14·0 | 66·1 | 118·5 | 53·1 | 71·6 | 57·3 | ·0 | 4·3 |
| 5 | | ·326 | E.N.E. | 248 | 70·8 | 63·4 | 75·3 | 58·9 | 16·4 | 67·1 | 121·6 | 55·1 | 71·8 | 64·0 | ·0 | 8·7 |
| 6 | | ·278 | E.N.E. | 140 | 69·7 | 65·4 | 75·1 | 64·9 | 10·2 | 70·0 | 114·1 | 60·2 | 72·0 | 77·3 | ·0 | 10·0 |
| 7 | | ·197 | E.N.E. | 234 | 74·4 | 69·0 | 77·2 | 63·5 | 13·7 | 70·4 | 119·0 | 59·2 | 71·8 | 72·0 | 0·040 | 6·0 |
| 8 | | ·156 | E.N.E. | 220 | 73·8 | 67·9 | 78·1 | 65·1 | 13·0 | 71·6 | 117·6 | 61·0 | 72·0 | 70·3 | ·0 | 5·7 |
| 9 | | ·118 | E.N.E. | 200 | 74·1 | 68·9 | 78·7 | 65·3 | 13·4 | 72·0 | 118·9 | 61·6 | 72·2 | 73·7 | ·0 | 4·3 |
| 10 | Perigee. G. S. Dec. | 29·987 | E.N.E. | 161 | 73·2 | 70·6 | 78·2 | 66·9 | 11·3 | 72·6 | 121·0 | 63·5 | 72·0 | 86·3 | 0·216 | 9·7 |
| 11 | New Moon | ·867 | N.E. | 285 | 76·0 | 73·3 | 80·6 | 69·3 | 11·3 | 75·0 | 123·4 | 67·1 | 72·2 | 85·7 | 0·020 | 7·0 |
| 12 | | ·919 | S. | 290 | 71·5 | 70·7 | 75·5 | 69·9 | 5·6 | 72·7 | 101·2 | 68·4 | 72·4 | 95·0 | 0·023 | 10·0 |
| 13 | | ·896 | E.S.E. | 235 | 70·2 | 68·6 | 73·9 | 69·2 | 4·7 | 71·6 | 104·9 | 67·4 | 72·2 | 91·0 | 2·800 | 10·0 |
| 14 | | ·966 | E.N.E. | 162 | 73·6 | 66·5 | 78·0 | 67·7 | 10·3 | 72·9 | 120·0 | 63·8 | 72·4 | 65·0 | 0·168 | 9·0 |
| 15 | | ·947 | N.E. | 357 | 75·4 | 71·1 | 79·5 | 62·5 | 17·0 | 71·0 | 116·4 | 58·3 | 72·2 | 78·0 | 0·001 | 0·7 |
| 16 | In Equat. | ·888 | N.E. | 329 | 79·5 | 74·0 | 86·7 | 69·9 | 16·8 | 78·3 | 124·0 | 66·2 | 72·4 | 74·0 | 0·003 | 3·0 |
| 17 | First Qr. | ·727 | N.E. | 500 | 84·5 | 75·5 | 98·3 | 70·9 | 27·4 | 84·6 | 136·0 | 67·5 | 72·6 | 61·3 | ·0 | 8·0 |
| 18 | | ·870 | S.S.W. | 397 | 70·5 | 66·6 | 75·9 | 68·2 | 7·7 | 72·1 | 111·1 | 65·3 | 73·1 | 78·7 | ·0 | 10·0 |
| 19 | | ·972 | S.S.W. | 230 | 69·9 | 68·4 | 74·6 | 64·3 | 10·3 | 69·5 | 92·3 | 62·8 | 72·7 | 91·0 | 0·384 | 10·0 |
| 20 | | 30·006 | E.N.E. | 144 | 74·8 | 72·4 | 79·6 | 67·3 | 12·3 | 73·5 | 121·1 | 65·9 | 72·9 | 87·3 | 0·015 | 4·0 |
| 21 | | 29·912 | N.E. | 192 | 76·5 | 70·8 | 80·1 | 68·9 | 11·2 | 74·5 | 119·0 | 63·6 | 73·1 | 71·0 | 0·001 | 8·0 |
| 22 | | ·606 | S. | 464 | 78·2 | 72·9 | 88·8 | 67·9 | 20·9 | 78·4 | 122·8 | 64·1 | 72·9 | 75·3 | 0·001 | 6·7 |
| 23 | Apogee. | ·953 | W. | 226 | 65·5 | 63·9 | 71·1 | 62·7 | 8·4 | 66·9 | 88·0 | 60·7 | 72·7 | 90·3 | 0·265 | 10·0 |
| 24 | G. N. Dec. | ·994 | S. | 154 | 72·2 | 70·2 | 75·1 | 63·2 | 11·9 | 69·2 | 105·7 | 61·2 | 72·9 | 89·0 | 0·109 | 10·0 |
| 25 | | ·988 | S. | 185 | 72·8 | 71·2 | 82·1 | 68·4 | 13·7 | 75·3 | 115·0 | 66·8 | 72·7 | 91·0 | 0·010 | 10·0 |
| 26 | Full Moon. | ·876 | E.N.E. | 291 | 77·9 | 74·1 | 83·0 | 69·4 | 13·6 | 76·2 | 121·5 | 66·1 | 72·9 | 82·5 | ·0 | 7·0 |
| 27 | | ·924 | S.S.W. | 327 | 73·2 | 69·7 | 77·2 | 72·5 | 4·7 | 74·9 | 116·3 | 69·2 | 72·7 | 81·3 | 0·390 | 10·0 |
| 28 | | 30·004 | N.E. | 170 | 71·7 | 69·4 | 80·7 | 69·2 | 11·5 | 75·0 | ... | 65·8 | 72·9 | 87·0 | ·0 | 10·0 |
| 29 | | 29·855 | N.E. | 295 | 79·9 | 74·8 | 85·5 | 68·5 | 17·0 | 77·0 | 123·5 | 63·3 | 72·5 | 75·0 | ·0 | 0·0 |
| 30 | | ·810 | N.E. | 306 | 79·2 | 74·3 | 87·0 | 71·6 | 15·4 | 79·3 | 125·6 | 68·1 | 72·3 | 76·0 | ·0 | 3·7 |
| 31 | In Equat. | ·736 | S. | 381 | 82·0 | 75·1 | 88·2 | 73·0 | 15·2 | 80·6 | 125·4 | 68·7 | 72·5 | 69·0 | ·0 | 0·3 |
| | | | | Sum. | | | | | | | | | | | Sum. | |
| Means | ..... | 29·961 | E.N.E. | 8308 | 73·8 | 69·3 | 79·5 | 66·7 | 12·8 | 73·2 | 116·5 | 63·4 | 72·4 | 78·0 | 5·046 | 7·1 |

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.

The Barometer at 9 a.m. reads 0·037 above the true mean for the day.

## SYDNEY, JANUARY, 1872.

| Date. | Evaporation. Inches. | Ozone, 0-10. Day. | Night. | Mean. | Remarks. |
|---|---|---|---|---|---|
| 1 | 0·084 | 4·5 | 5·0 | 4·8 | Cloudy, dull, like rain. Evening cloudy and fine alternately from 5 p.m. Lightning, W.S.W., N.W., and N.N.W. from 8·25 p.m. |
| 2 | 0·291 | 4·5 | 5·0 | 4·8 | Morning foggy, fine at 9 a.m. Thunderstorm, W., 12·47 p.m.; another N. at 3 p.m. Heavy rain, 12·58 p.m. S. gale, 7·10 p.m. Lightning, S., 9·25 p.m. |
| 3 | 0·296 | 3·0 | 4·0 | 3·5 | Fine from about 9·30 a.m. until 1 p.m. Turned fine again in the afternoon until 6 p.m. Dull like rain at 9 p.m. Cool day throughout. |
| 4 | 0·248 | 3·5 | 4·0 | 3·8 | Morning cloudy. Evening cool. |
| 5 | 0·238 | 3·0 | 4·0 | 3·5 | Fine after 11·30 a.m. Turned cloudy again in the afternoon. Light shower, 9 p.m. At sunset the clouds to W., a yellow colour mixed with green. |
| 6 | 0·069 | 4·0 | 3·5 | 3·8 | Cloudy, dropping rain at 3·35 p.m. Clouds broken in the evening. |
| 7 | 0·218 | ... | ... | 2·5 | Evening fine and clear. Rain at 3·30 a.m. Heavy clouds all round the horizon during the day. |
| 8 | 0·244 | 2·5 | 4·0 | 3·3 | Fine from 11 a.m. until 6·30 p.m. Evening cloudy and fine alternately. Heavy clouds during day. |
| 9 | 0·242 | 2·5 | 3·5 | 3·0 | Fine from 11 a.m. until evening, cleared again about 7·45 p.m. Light shower, 7·38 a.m. Heavy shower, 11·50 p.m. Two meteors observed. |
| 10 | 0·144 | 4·0 | 3·5 | 3·8 | Cloudy until evening, then cloudy and fine alternately. Morning showery. |
| 11 | 0·173 | 4·0 | 3·5 | 3·8 | Fine from 10·30 a.m. until 11·30 a.m. Light showers in the morning after 8·20 a.m. Very light rain about 9·55 p.m. |
| 12 | 0·078 | 4·0 | 4·5 | 4·3 | Cloudy day and dull. Raining lightly at intervals during the day. Lightning, N.W. at 9·35 p.m. |
| 13 | 0·105 | 5·5 | 5·0 | 5·3 | Cloudy day and dull. Heavy rain from 4·30 a.m. until 11·20 a.m. Light rain at 8·40 p.m. |
| 14 | 0·186 | ... | ... | 2·3 | Cloudy until about noon. Warm day throughout. |
| 15 | 0·216 | 5·0 | 4·5 | 4·8 | Fine and warm. Clouds formed about 7 p.m. and cleared again by 7·45 p.m. |
| 16 | 0·242 | 1·5 | 3·5 | 2·5 | Cloudy until 9·30 a.m. Thick fog from 6·30 a.m. until about 7·15 a.m. Very hot day. Electrical clouds, W. |
| 17 | 0·318 | 2·0 | 5·0 | 3·5 | Cloudy after 8·30 a.m. Very hot wind all forenoon until 12·4 p.m. Towards evening clouds cleared and was cloudy again at 8·30 p.m. |
| 18 | 0·174 | 3·0 | 5·0 | 4·0 | Cloudy and dull all day, like rain. S. gale from 2·15 a.m. |
| 19 | 0·055 | 4·5 | 4·0 | 4·3 | Cloudy and dull. Heavy rain from 5·30 a.m. until 6·10 a.m. Dropping rain at 2·5 p.m., also at 9 p.m. |
| 20 | 0·176 | 3·0 | 4·0 | 3·5 | Morning cloudy and showery, clouds cleared about noon. Evening very close. Lunar halo, 8·43 p.m. Shower at 11·35 p.m. |
| 21 | 0·198 | ... | ... | 2·5 | Cloudy from 8 a.m. until after 11 a.m. Very warm all day. |
| 22 | 0·217 | 4·0 | 7·0 | 5·5 | Cloudy and very warm after 11 a.m. Thunderstorm from W., 3·46 p.m., dropping rain. Another storm S.W. at 7·15 p.m. Partial rainbow, 5 55 p.m. S. gale and rain at 9 p m. Lightning nearly all round during evening. |
| 23 | 0·039 | 4·5 | 5·0 | 4·8 | Cloudy day with light showers at intervals. Steady rain began about 7 p.m. |
| 24 | 0·072 | 4·5 | 2·0 | 3·3 | Cloudy and dull. Fine about 4 p.m. for a little while and turned cloudy again. Dropping rain at 6·30 p.m. |
| 25 | 0·060 | 3·5 | 3·0 | 3·3 | Cloudy, very dull. Cleared to N. about 3·45 p.m., fine until after 6 p.m. Dropping rain between 8·10 a.m., and 8·45 a.m. |
| 26 | 0·254 | 4·0 | 4·5 | 4·3 | Morning cloudy until 6·30 a.m.; evening also cloudy. Heavy thunderstorm from S.W., 4·55 p.m. Lightning. Passing heavy showers began 5·41 p.m. |
| 27 | 0·150 | 2·5 | 4·0 | 3·3 | Cloudy, dull like rain. |
| 28 | 0·068 | ... | ... | 2·8 | Fine all afternoon until about 6·30 p.m. Morning dull, like rain. |
| 29 | 0·212 | 2·0 | 3·5 | 2·8 | Very warm throughout. Towards sunset light clouds formed and disappeared about 7·30 p.m. Electrical clouds W. all forenoon and afternoon. |
| 30 | 0·226 | 2·5 | 4·0 | 3·3 | Morning cloudy and dull until after 9·30 a.m. Electrical clouds W. after 11 a.m. |
| 31 | 0·252 | 1·5 | 5·0 | 3·3 | Fine all day and very hot. Lightning N. at 8·15 p.m. |
| | Sum. | | | | |
| Means | 5·545 | 3·4 | 4·2 | 3·7 | |

Cloudy sky taken at 9 a.m., 3 p.m., and 9 p.m. Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.

Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

Dew on the 15th, 16th, and 22nd.

| Date. | Self-registering Barometer at 32°. | | | | | Self-registering Anemometer. | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mean. | Max. | Hour. | Min. | Hour. | S. | S.S.W. | S.W. | W.S.W. | W. | W.N.W. | N.W. | N.N.W. | N. | N.N.E. | N.E. | E.N.E. | E. | E.S.E. | S.E. | S.S.E. | Velocity. Total. Miles. | Velocity. Mean. pr. hr. | Mean Pressure. lbs. | Greatest Pressure. Direction of Wind. Time. | | |
| 1 | 29·892 | 29·960 | 9 a.m. | 29·820 | 8 a.m. | 7 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 8 | 4 | 1 | 1 | 1 | 2 | 158 | 6·6 | 0·2 | 3·1 | S. | 10· 0 a.m. |
| 2 | ·787 | ·960 | 8 a.m. | ·640 | 6 p.m. | 12 | ... | 1 | ... | ... | 1 | 1 | ... | 1 | 1 | 1 | 1 | 4 | ... | ... | 1 | 449 | 18·7 | 1·7 | 4·8 | S. | 4· 5 a.m. |
| 3 | 30·088 | 30·160 | 8 a.m. | ·975 | 9 a.m. | 6 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 2 | 14 | 338 | 14·1 | 1·0 | 5·8 | S. | 10·49 a.m. |
| 4 | ·167 | ·270 | 8 a.m. | 30·100 | 4 & 5 p.m. | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 6 | 8 | 5 | 2 | 1 | ... | ... | 240 | 10·0 | 0·5 | 3·1 | N.E. | 5·20 p.m. |
| 5 | ·224 | ·270 | 9 & 10 a.m. | ·175 | 3 a.m. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 6 | 18 | ... | ... | ... | ... | 248 | 10·3 | 0·5 | 2·0 | E.N.E. | 1·40 p.m. |
| 6 | ·152 | ·230 | 9 a.m. | ·105 | 4 a.m. | ... | ... | ... | ... | ... | ... | ... | ... | ... | 7 | 3 | 14 | ... | ... | ... | ... | 140 | 5·8 | 0·2 | 1·6 | N.E. | 3· 5 p.m. |
| 7 | ·099 | ·160 | 10 a.m. | ·045 | 3 a.m. | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 2 | 17 | 4 | ... | ... | ... | 234 | 9·8 | 0·5 | 3·1 | N.E. | 10·46 a.m. |
| 8 | ·035 | ·100 | 9 & 10 a.m. | 30·000 | 5, 6, & 7 p.m. & 2 & 3 a.m. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 24 | ... | ... | ... | ... | 220 | 9·2 | 0·4 | 1·6 | E.N.E. | 12·23 p.m. |
| 9 | ·017 | ·100 | 9 & 10 a.m. | 29·985 | 5, 6, & 7 a.m. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 9 | 4 | 8 | 1 | 2 | 200 | 8·3 | 0·3 | 2·0 | E.N.E. | 3·20 p.m. |
| 10 | 29·874 | 29·970 | 9 a.m. | 29·830 | 3 & 4 a.m. | ... | ... | ... | ... | 6 | ... | ... | ... | 3 | 1 | 2 | 10 | 2 | ... | ... | ... | 161 | 6·7 | 0·2 | 0·8 | E.N.E. | 4·50 p.m. |
| 11 | ..... | ..... | ..... | ..... | ..... | 3 | 2 | ... | ... | 1 | ... | ... | ... | ... | ... | 10 | 2 | 5 | 1 | ... | ... | 285 | 11·9 | 0·7 | 3·1 | N.E. | 7· 0 p.m. |
| 12 | ..... | ..... | ..... | ..... | ..... | 18 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 3 | ... | 290 | 12·1 | 0·7 | 3·9 | S. | 2· 8 p.m. |
| 13 | 29·885 | 29·930 | 8 a.m. | 29·855 | 5 p.m. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 15 | 9 | ... | 235 | 9·8 | 0·5 | 3·1 | E.S.E. | 9·38 a.m. |
| 14 | ·894 | ·930 | 6 a.m. | ·860 | 5 p.m. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 9 | 10 | 4 | 1 | ... | ... | 162 | 6·8 | 0·2 | 0·8 | E.N.E. | 2· 1 p.m. |
| 15 | ·849 | ·905 | 10 a.m. | ·805 | 6 p.m. | ... | ... | ... | ... | ... | 2 | ... | ... | 1 | ... | 20 | 1 | ... | ... | ... | ... | 357 | 14·9 | 1·1 | 6·5 | N.E. | 3·38 p.m. |
| 16 | ·738 | ·850 | 9 a.m. | ·695 | 7 p.m. | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 1 | 11 | 8 | 3 | ... | ... | ... | 329 | 13·7 | 0·9 | 7·6 | E. | 6·48 p.m. |
| 17 | ·654 | ·815 | 8 a.m. | ·575 | 5 p.m. | 6 | ... | ... | ... | 1 | ... | ... | ... | 1 | ... | 11 | 1 | 4 | ... | ... | ... | 500 | 20·8 | 2·2 | 14·0 | N.E. | 6·17 p.m. |
| 18 | ·859 | ·920 | 8 a.m. | ·825 | 9 a.m. | 7 | 14 | 1 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 397 | 16·5 | 1·4 | 5·8 | S.S.W. | 12· 4 p.m. |
| 19 | ..... | ..... | ..... | ..... | ..... | 10 | 13 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 230 | 9·6 | 0·5 | 1·3 | S.S.W. | 12·22 p.m. |
| 20 | ..... | ..... | ..... | ..... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 23 | 1 | ... | ... | ... | 144 | 6·0 | 0·2 | 1·1 | E.N.E. | 4·20 p.m. |
| 21 | 29·720 | 29·865 | 9 & 10 a.m. | 29·605 | 8 a.m. | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | 12 | 9 | ... | ... | ... | ... | 192 | 8·0 | 0·3 | 1·3 | E.N.E. | 6· 0 p.m. |
| 22 | ·604 | ·865 | 8 a.m. | ·430 | 4 p.m. | 12 | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | 3 | 6 | 1 | ... | ... | ... | 464 | 19·3 | 1·9 | 12·0 | S. | 9·21 p.m. |
| 23 | ·813 | ·840 | 9 & 10 p.m. | ·785 | 4 p.m. | 1 | 7 | ... | 2 | 13 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 226 | 9·4 | 0·4 | 1·4 | S. | 1·20 p.m. |
| 24 | ·791 | ·825 | 9 a.m. | ·750 | 4 p.m. | 8 | 3 | ... | ... | 3 | ... | ... | ... | 1 | ... | ... | 1 | 4 | 1 | ... | 3 | 154 | 6·4 | 0·2 | 1·6 | S. | 7·15 a.m. |
| 25 | ·786 | ·825 | 10 & 11 a.m. | ·730 | 4 & 5 a.m. | 18 | ... | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | 1 | ... | 3 | 185 | 7·7 | 0·3 | 2·2 | S.S.W. | 11·24 a.m. |
| 26 | ·676 | ·750 | 8 a.m. | ·560 | 4 p.m. | 4 | 1 | ... | 1 | 2 | 3 | ... | ... | 2 | ... | 1 | 8 | 1 | 1 | ... | ... | 291 | 12·1 | 0·7 | 6·1 | N.E. | 4·23 p.m. |
| 27 | ·806 | ·840 | 8 a.m. | ·775 | 4 & 5 p.m. | 3 | 20 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 327 | 13·6 | 0·9 | 6·5 | S.S.W. | 10·17 a.m. |
| 28 | ·755 | ·830 | 9 a.m. | ·700 | 3, 4, & 5 a.m. | 1 | 2 | ... | ... | ... | ... | 1 | 3 | 1 | ... | 7 | 4 | 4 | ... | 1 | ... | 170 | 7·1 | 0·3 | 1·6 | N.W. | 4·55 a.m. |
| 29 | 634 | ·710 | 9 a.m. | ·595 | 5 & 6 p.m. | 6 | ... | ... | ... | 1 | ... | ... | ... | 1 | ... | 8 | 7 | 1 | ... | ... | ... | 295 | 12·3 | 0·8 | 4·2 | N.E. | 5· 5 p.m. |
| 30 | ·591 | ·685 | 9 a.m. | ·555 | 5 & 11 p.m. | ... | 2 | ... | 1 | ... | .. | ... | ... | ... | ... | 10 | 8 | 3 | ... | ... | ... | 306 | 12·8 | 0·8 | 5·4 | N.E. | 5·49 p.m. |
| 31 | ·589 | ·720 | 8 a.m. | ·500 | 3, 4, & 5 p.m. | 10 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 9 | 3 | 2 | ... | ... | ... | 381 | 15·9 | 1·3 | 3·4 | N.E. | 5· 0 p.m. |
| Sums or Means. | 29·851 | Jan. 4th & 5th. 30·270 8, 9, & 10 a.m. | | Jan. 22nd. 29·430 4 p.m. | | 132 | 67 | 4 | 6 | 28 | 9 | 3 | 4 | 13 | 20 | 141 | 193 | 50 | 32 | 17 | 25 | Sum 8308 | Mean 11·2 | Mean. 0·7 | | | |

The self-registering Barometer is photographic, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot, is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour.

# ABTSRACT FROM METEOROLOGICAL STATIONS,

## For the Month of JANUARY, 1872.

| Stations. | Least Distance from East Coast in miles. | Height above sea in feet. | Mean of Observations taken at 9 a.m., January, 1872. | | | | | | | | For 24h, previous to 9 a.m. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Barometer. | Temperature in Shade. | Humidity 0 to 100. | Wind. | | Temperature in Shade. | | | | Rain. | | | | Evaporation in inches. |
| | | | | | | Direction. | Force. 0·6 | Mean. Max. | Mean. Min. | Extreme Max. | Extreme Min. | Total Fall, inches. | No. of Days | Greatest Fall, inches. | Date | |
| Tenterfield | 80 | ... | ... | 70·4 | ... | E.S.E. | 1·8 | 80·6 | 60·1 | 89·7 | 50·4 | 6·020 | 12 | 1·180 | 8 | 5·580 |
| Grafton | 22 | ... | ... | 77·9 | ... | S.E. | 1·1 | 87·2 | 68·6 | 99·7 | 62·2 | 8·200 | 11 | 1·915 | 14 | 11·307 |
| Bourke | 393 | ... | ... | ... | ... | N. | 0·1 | 93·4 | ... | 103·4 | ... | 6·030 | 5 | 2·900 | 23 | ... |
| Narrabri | 196 | ... | ... | 83·9 | ... | N.W. | 1·7 | 95·6 | 72·2 | 102·9 | 59·8 | 4·880 | 6 | 2·160 | 6 | 9·644 |
| Armidale | 80 | 3278 | 30·020 | 71·2 | 74·0 | E. | 1·0 | 80·2 | 62·1 | 88·2 | 52·1 | 7·980 | 10 | 2·650 | 24 | 9·706 |
| Port Macquarie | 0 | ... | ... | 74·7 | ... | N.E. | 1·7 | 80·4 | 69·0 | 86·8 | 64·0 | 4·110 | 13 | 1·050 | 6 | 9·374 |
| Murrurundi | 94 | 1545 | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Cassilis | 120 | ... | ... | 82·2 | ... | N.E. | ... | 95·2 | 69·1 | 104·1 | 55·2 | 0·980 | 2 | 0·860 | 27 | ... |
| Muswellbrook | 68 | 475 | ... | ... | ... | W. | 1·8 | ... | ... | ... | ... | 1·610 | 3 | 0·620 | * | 10·586 |
| Dubbo | 182 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Mudgee | 121 | ... | ... | 80·1 | ... | S.E. | 1·2 | 90·7 | 69·4 | 99·4 | 55·0 | 2·060 | 8 | 0·700 | 24 | 8·015 |
| Dalwood | 27 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | 3·020 | 8 | 1·570 | 13 | ... |
| West Maitland | 18 | ... | ... | 77·4 | ... | S.E. | 0·6 | 85·4 | 69·3 | 99 8 | 58·5 | 2·665 | 13 | 0·800 | 15 | 5·496 |
| Lambton | 7 | ... | ... | 74·9 | ... | E. | 1·5 | 83·8 | 66·0 | 102·8 | 55·0 | 1·890 | 11 | 0·530 | 6 | 5·808 |
| Newcastle | 1 | 112 | 29·933 | 74·4 | 83·0 | S.S.W. | 0·2 | 81·6 | 67·2 | 101·3 | 62·3 | 1·420 | 14 | 0·350 | 6 | ... |
| Orange | 124 | 2891 | ... | 72·6 | ... | N.E. | 2·0 | 82·7 | 62·5 | 89·8 | 47·9 | 3·450 | 7 | 1·250 | 23 | 6·540 |
| Bathurst | 96 | 2200 | 29·865 | 78·9 | 57·0 | N.W. | 0·8 | 94·4 | 63·4 | 103·0 | 54·0 | 2·520 | 8 | 1·290 | 20 | ... |
| Kurrajong | 35 | 1870 | ... | 66·7 | ... | E.S.E. | ... | 73·4 | 59·9 | 90·0 | 48·0 | 7·300 | 16 | 1·800 | 13 | ... |
| Mount Victoria | 61 | 3496 | 29·882 | 74·3 | 69·0 | W. | 0·1 | 87·4 | 61·1 | 99·0 | 49·3 | 1·090 | 7 | 0·470 | 25 | ... |
| Woodford | 50 | 2192 | 30·007 | 69·1 | ... | W. | 0·1 | 75·5 | 62·6 | 89·4 | 52·7 | 3·580 | 17 | 0·800 | 23 | ... |
| Parramatta | 16 | ... | ... | 75·7 | ... | S. | 1·2 | 84·2 | 67·2 | 99·0 | 56·1 | 3·380 | 12 | 1·720 | 27 | ... |
| Sydney | 5 | 155 | 29·961 | 73·2 | 78·0 | E.N.E. | 0·7 | 79·5 | 66·7 | 98·3 | 58·9 | 5·046 | 15 | 2·800 | 13 | 5·545 |
| Liverpool | 16 | ... | ... | 75·4 | ... | ..... | .. | 85·2 | 65·5 | 102·0 | 55·0 | 2·725 | 16 | 1·100 | 23 | ... |
| Wentworth | 476 | ... | ... | 81·4 | ... | S. | 2·2 | 96·4 | 66·4 | 112·3 | 52·0 | 3·630 | 4 | 2·430 | 17 | 13·081 |
| Wilton | 13 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | 4·850 | 9 | 3·000 | 23 | ... |
| Cordeaux River | 10 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | 6·590 | 10 | 2·110 | 24 | ... |
| Young | 140 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Wollongong | 0 | ... | ... | 72·6 | ... | S.E. | 1·5 | 79·7 | 65·5 | 86·4 | 52·7 | 4·060 | 5 | 1·000 | † | 5·165 |
| Moss Vale | 31 | ... | ... | 71·7 | ... | E. | 0·9 | 81·7 | 61·7 | 96·4 | 51·8 | 5·990 | 10 | 4·350 | 23 | ... |
| Goulburn | 54 | 2129 | 29·944 | 72·6 | 60·0 | W.N.W. | 0·0 | 88·0 | 57·1 | 100·7 | 43·1 | 2·640 | 8 | 1·350 | 23 | 6·463 |
| Terrara | 0 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | 5·530 | 9 | 1·830 | 23 | ... |
| Wagga Wagga | 161 | ... | ... | 81·8 | ... | S.E. | 1·5 | 92·2 | 71·3 | 106·1 | 51·9 | 1·660 | 4 | 0·850 | 23 | 5·388 |
| Cape St. George | 0 | 175 | 29·912 | 72·7 | 79·0 | N.E. | 1·0 | 82·2 | 63·2 | 94·2 | 53·6 | 2·713 | 10 | 0·862 | 24 | ... |
| Queanbeyan | 60 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Urana | 218 | ... | ... | 82·9 | ... | N.W. | ... | 95·5 | 70·2 | 101·1 | 50·1 | 0·970 | 2 | 0·770 | 31 | 6·390 |
| Deniliquin | 287 | 410 | 29·983 | ~~31·0~~ | 58·0 | S.E. | 1·7 | 103·1 | ~~39·0~~ | 115·1 | ~~24·5~~ | 0·140 | 2 | 0·070 | ‡ | ... |
| Kiandra | 88 | 4640 | 29·945 | 62·0 | 66·0 | N.W. | 0·5 | 77·2 | 46·7 | 89·6 | 26·0 | 4·270 | 12 | 1·700 | 22 | ... |
| Cooma | 52 | 2637 | ... | ... | ... | N. | 2·6 | ... | 57·0 | ... | 37·8 | 2·860 | 9 | 1·700 | 23 | 5·651 |
| Albury | 175 | 572 | ... | 82·1 | ... | E. | 0·6 | 97·7 | 66·5 | 112·4 | 60·0 | 0·720 | 3 | 0·520 | 23 | 13·251 |
| Eden | 0 | 107 | 29·757 | 71·6 | 73·0 | N.E. | 1·1 | 79·4 | 63·7 | 86·0 | 50·1 | 4·190 | 11 | 1·460 | 14 | ... |

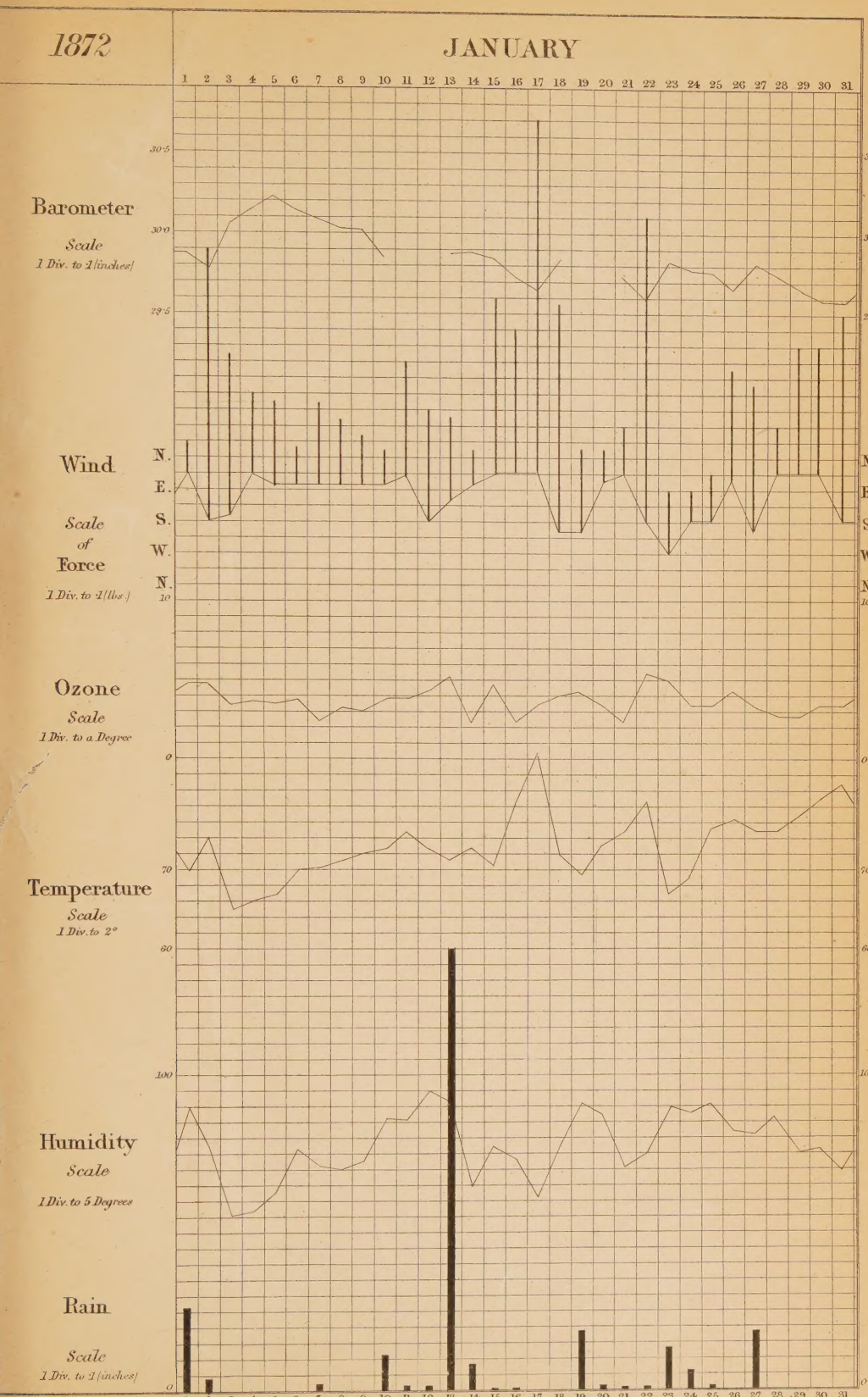
* 14th and 28th. † 1st, 23rd, and 24th. ‡ 12th and 31st.

Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only eight of the stations have barometers and hygrometers.

## REMARKS.

Tenterfield—Stormy, 2nd.
Grafton—River up 3 feet on 15th. Thunderstorms, 23rd and 24th.
Bourke—Thunderstorm, 22nd. Plenty of grass and water.
Armidale—Thunderstorm, 23rd.
Port Macquarie—Thunderstorms, 2nd, 12th, and 27th.
Muswellbrook—Thunderstorms, 26th and 27th.
West Maitland—Thunderstorm, 26th. S. squalls and rain, 2nd.
Lambton—Thunderstorms, 22nd and 26th.
Newcastle—Stormy, 23rd. Foggy, 11th and 12th.
Orange—Thunderstorms, 3rd, 13th, 14th, 25th, and 27th. Meteor, 15th.
Bathurst—Thunderstorm, 23rd.
Kurrajong—Thunderstorms, 22nd and 26th.
Mount Victoria—Observations from 14th instant. Storms, 26th and 27th.
Parramatta—Twenty-seven meteors seen on 17th. Heavy storms, 2nd and 26th.
Sydney—Thunderstorms, 2nd, 22nd, and 26th. S. Gales, 2nd, 18th, and 22nd.
Liverpool—Thunderstorms, 2nd, 22nd, and 26th. Lunar rainbow, 24th.
Wentworth—Thunderstorms, 15th, 17th, 30th, and 31st. Hot wind, 21st.
Wilton—Thunderstorms, 23rd and 27th.
Cordeaux River—Thunderstorms, 13th, 22nd, and 27th.
Wollongong—Thunderstorms, 2nd, 22nd, and 26th. Lunar rainbow, 24th.
Moss Vale—Thunderstorms, 22nd, 26th, and 29th. Strong S. wind on 22nd.
Goulburn—Thunderstorm, 26th. Hot wind, 31st.
Terrara—Thunderstorms, 22nd and 26th. Hot wind, 17th.
Cape St. George—Thunderstorm, 27th. S. gales, 4th, 18th, and 23rd. Hot wind, 18th.
Urana—Shock of earthquake on 2nd. Thunderstorms, 30th, and 31st.
Deniliquin—Thunderstorms, 20th and 30th. Hot wind, 11th and 16th. S. gale, 11th.
Kiandra—Shock of Earthquake, 3rd. Thunderstorms, 8th, 12th, 19th, and 28th.
Cooma—Shock of earthquake, 3rd.
Albury—Thunderstorms, 2nd, 7th, 20th, 30th, and 31st. Hot wind, 21st.

# METEOROLOGICAL CURVES




*The dark vertical lines represent Force of Wind & Rain.*

Lithographed at the Surveyor Generals Office Sydney Feby 1872

*Dew on the 15th 16th & 22nd*

# METEOROLOGICAL OBSERVATIONS

MADE AT THE

# GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

# ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

# MONTH OF FEBRUARY, 1872;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER

1872.

[*Price*, 6*d*.] 3*u* 16—72

# METEOROLOGICAL OBSERVATIONS.

## GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s

Magnetic Variation 9° 32′ 41″ East.

### FEBRUARY, 1872.

### GENERAL ABSTRACT.

| | | | |
|---|---|---|---|
| **BAROMETER** .. At 32° Fah. | Highest Reading ... ... | 30·285 | ... On the 26th, at 8 a.m., and 27th, at 11 a.m. |
| | Lowest Reading ... ... | 29·430 | ... On the 7th, at 5 p.m. |
| | Mean Height ... ... | 29·863 | |

(Being 0·066 in. greater than that in the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **WIND** .. .. | Greatest Pressure... ... | 8·0 lbs. | ... On the 12th. |
| | Mean Pressure ... ... | 0·8 lbs. | |
| | Number of Days Calm ... | 0 | |
| | Prevailing Direction ... | S. | |

(Prevailing direction during the same month for the preceding 13 years ... S.)

| | | | |
|---|---|---|---|
| **TEMPERATURE** | Highest in the Shade ... | 83·0 | ... On the 21st. |
| | Lowest in the Shade ... | 59·8 | ... On the 24th. |
| | Greatest Range ... ... | 19·9 | ... On the 24th. |
| | Highest in the Sun ... | 124·0 | ... On the 17th. |
| | Highest in a Black Box with Glass Top ... ... | 190·0 | ... On the 12th. |
| | Lowest on the Grass ... | 55·9 | ... On the 24th. |
| | Mean Diurnal Range ... | 11·9 | |
| | Mean in the Shade ... | 71·9 | |

(Being 1·2 greater than that of the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **HUMIDITY** .. | Greatest Amount... ... | 97·0 | ... On the 2nd. |
| | Least ... ... ... | 57·0 | ... On the 28th. |
| | Mean ... ... ... | 76·5 | |

(Being 2·4 greater than that of the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **RAIN** .. .. | Greatest Fall ... ... | 0·425 inch. | On the 3rd. |
| | Number of Days ... ... | 19 | |
| | Total Fall ... ... | 1·063 inch. | 65 ft. above the ground. |
| | | 1·648 inch. | 15 inches above the ground. |

(Being 4·487 inches less than that of the same month on an average of the preceding 13 years.)

| | | |
|---|---|---|
| **EVAPORATION** | Total Amount ... ... | 4·238 inches. |
| **OZONE** .. .. | Mean Amount ... ... | 3·8 |

(Being 0·7 less than that in the same month on an average of the preceding 12 years.)

| | | |
|---|---|---|
| **ELECTRICITY** .. | Number of Days Lightning | 3 |
| **CLOUDY SKY** .. | Mean Amount ... ... | 7·9 |
| | Number of Clear Days ... | 0 |
| **METEORS** .. | Number Observed ... | 1 |

### REMARKS.

During the month the mean barometer was 0·066 above the average, with S. and S.E. winds prevalent, bringing heavy rain on the coast, especially to north, the greatest fall being 7·620 inches at Port Macquarie. The mean temperature at Sydney was 1·2 greater than the average, and the humidity 2·4 greater.

Thunderstorms were frequent, but less so than during the previous three months, the total number being only 54.

On the 5th, from 1 a.m. to daylight, a fine aurora was seen at Eden, 60° high, and extending from S.E. to S.W.

NOTE.—In December, 1871, please insert 0·194 for 0·450 under Barometer; (greater than that of same month on an average of preceding 12 years.)

## SYDNEY, FEBRUARY, 1872.

| Date. | Moon's Phases. | Standard Barometer at 9 a.m., corrected to Mean Sea Level. | Wind. | | Temperature. | | | | | | | | | Humidity. 0-100. | Rain. Inches. | Cl'dy Sky. 0-10. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Dry. | Wet. | Shade. | | | | Sun. | Grass. | Sea Water. | | | |
| | | | Prevailing Direction. | Total Velocity. Miles. | Mean 9.3.9. | Mean 9.3.9. | Max. | Min. | Range | Mean. | Max. | Min. | 9 a.m. | Mean 9.3.9. | | |
| 1 | | 29·878 | S. | 288 | 75·1 | 72·3 | 80·0 | 71·3 | 8·7 | 75·7 | 118·6 | 67·0 | 72·3 | 85·7 | ·0 | 10·0 |
| 2 | Last Qr. | ·771 | S. | 410 | 77·5 | 73·4 | 82·8 | 68·7 | 14·1 | 75·8 | 119·5 | 64·1 | 72·1 | 79·7 | 0·005 | 4·7 |
| 3 | | ·887 | S. | 195 | 67·5 | 66·0 | 72·4 | 64·5 | 7·9 | 68·5 | 87·0 | 62·6 | 72·3 | 90·7 | 0·452 | 10·0 |
| 4 | | ·660 | S. | 389 | 72·0 | 70·4 | 76·6 | 65·2 | 11·4 | 70·9 | 97·5 | 62·4 | 72·1 | 91·0 | 0·086 | 10·0 |
| 5 | | 30·014 | S. | 275 | 67·6 | 62·2 | 70·7 | 64·7 | 6·0 | 67·7 | 101·9 | 61·6 | 71·7 | 71·0 | 0·045 | 10·0 |
| 6 | G. S. Dec. | ·004 | E.N.E. | 135 | 69·3 | 65·9 | 75·7 | 60·3 | 15·4 | 68·0 | 120·6 | 56·7 | 71·9 | 81·3 | 0·438 | 6·7 |
| 7 | | 29·730 | N.E. | 249 | 75·3 | 68·9 | 80·6 | 62·9 | 17·7 | 71·8 | 121·8 | 57·1 | 71·7 | 68·3 | 0·002 | 6·0 |
| 8 | Perigee. | ·876 | E. | 410 | 71·9 | 66·2 | 75·6 | 65·5 | 10·1 | 70·6 | 112·6 | 60·8 | 71·9 | 70·7 | ·0 | 8·3 |
| 9 | New Moon | ·965 | S.S.W. | 406 | 73·3 | 71·1 | 80·1 | 67·9 | 12·2 | 74·0 | 120·0 | 63·3 | 71·5 | 87·3 | 0·023 | 10·0 |
| 10 | | 30·086 | S.S.W. | 512 | 71·0 | 67·9 | 75·1 | 67·7 | 7·4 | 71·4 | 114·0 | 64·3 | 71·3 | 83·0 | 0·005 | 10·0 |
| 11 | | ·119 | E. | 143 | 73·6 | 70·6 | 79·4 | 66·3 | 13·1 | 72·9 | 119·5 | 63·3 | 71·5 | 84·0 | 0·106 | 10·0 |
| 12 | | 29·963 | S. | 462 | 78·0 | 73·8 | 81·9 | 67·9 | 14·0 | 74·9 | 121·0 | 62·7 | 71·3 | 79·0 | 0·002 | 3·7 |
| 13 | In Equat. | 30·055 | S.S.W. | 287 | 70·4 | 67·0 | 72·2 | 68·9 | 3·3 | 70·6 | 79·0 | 66·5 | 71·5 | 82·0 | ·0 | 10·0 |
| 14 | | ·093 | S.S.E. | 135 | 73·7 | 71·8 | 78·9 | 66·7 | 12·2 | 72·8 | 117·7 | 63·8 | 71·3 | 89·0 | 0·033 | 10·0 |
| 15 | | ·121 | S. | 462 | 73·9 | 70·1 | 78·8 | 69·1 | 9·7 | 74·0 | 117·0 | 64·8 | 70·9 | 79·7 | 0·001 | 9·3 |
| 16 | First Qr. | ·246 | S. | 253 | 73·9 | 68·7 | 78·9 | 68·8 | 10·1 | 73·9 | 122·6 | 63·1 | 71·1 | 74·3 | 0·020 | 7·3 |
| 17 | | ·156 | E.N.E. | 200 | 73·4 | 69·4 | 79·0 | 66·8 | 12·2 | 72·9 | 124·0 | 62·1 | 70·9 | 79·7 | 0·119 | 5·3 |
| 18 | | ·093 | N.E. | 232 | 76·6 | 67·7 | 80·1 | 67·6 | 12·5 | 73·9 | 123·8 | 65·1 | 70·7 | 59·0 | 0·045 | 10·0 |
| 19 | | ·093 | E. | 201 | 75·5 | 69·0 | 81·0 | 66·5 | 14·5 | 73·8 | 121·0 | 61·5 | 70·9 | 68·3 | ·0 | 7·0 |
| 20 | G.N.Dec. Apogee. | ·001 | E. | 158 | 73·7 | 68·8 | 78·7 | 64·9 | 13·8 | 71·8 | 119·6 | 61·1 | 70·7 | 74·3 | 0·030 | 4·0 |
| 21 | | 29·714 | S. | 339 | 74·5 | 69·0 | 83·0 | 64·4 | 18·6 | 73·7 | 123·0 | 59·3 | 70·9 | 73·0 | 0·002 | 7·0 |
| 22 | | ·963 | S. | 322 | 66·8 | 62·5 | 73·1 | 65·4 | 7·7 | 69·3 | 107·0 | 62·8 | 69·9 | 75·7 | 0·071 | 10·0 |
| 23 | | 30·255 | E. | 215 | 70·5 | 62·8 | 76·4 | 62·9 | 13·5 | 69·7 | 117·6 | 57·3 | 71·3 | 62·3 | 0·024 | 6·7 |
| 24 | Full Moon. | ·208 | N.N.E. | 358 | 72·1 | 66·2 | 79·7 | 59·8 | 19·9 | 69·8 | 119·2 | 55·9 | 71·3 | 70·3 | ·0 | 6·0 |
| 25 | | ·073 | S.S.E. | 304 | 68·0 | 67·0 | 75·1 | 65·6 | 9·5 | 70·4 | 109·9 | 61·7 | 71·3 | 94·0 | 0·135 | 10·0 |
| 26 | | ·369 | S.E. | 277 | 72·3 | 64·5 | 75·2 | 66·0 | 9·2 | 70·6 | 110·0 | 63·0 | 71·5 | 62·7 | 0·003 | 10·0 |
| 27 | In Equat. | ·470 | E.S.E. | 250 | 71·7 | 63·7 | 77·7 | 65·9 | 11·8 | 71·8 | 119·5 | 61·1 | 70·9 | 61·0 | ·0 | 10·0 |
| 28 | | ·463 | E.N.E. | 203 | 72·8 | 65·9 | 78·3 | 67·9 | 10·4 | 73·1 | 119·0 | 62·7 | 70 7 | 66·7 | ·0 | 3·3 |
| 29 | | ·316 | E. | 159 | 72·6 | 67·7 | 78·9 | 61·5 | 17·4 | 70·2 | 122·0 | 58·1 | 70·9 | 74·7 | 0·001 | 4·3 |
| | | | | Sum. | | | | | | | | | | | Sum. | |
| Means | ..... | 30·057 | S. | 8229 | 72·6 | 67·9 | 77·8 | 65·9 | 11·9 | 71·9 | 114·7 | 61·9 | 71·3 | 76·5 | 1·648 | 7·9 |

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.

The Barometer at 9 a.m. reads 0·024 above the true mean for the day.

## SYDNEY, FEBRUARY, 1872.

| Date. | Evaporation. Inches. | Ozone, 0-10. Day. | Night. | Mean. | Remarks. |
|---|---|---|---|---|---|
| 1 | 0·113 | 5·0 | 4·0 | 4·5 | Cloudy and dull. Light shower at 12·22 p.m. Light showers also in the evening after 5 p.m. Evening cloudy and fine alternately after 10·30 p.m. |
| 2 | ..... | 2·5 | 6·0 | 4·3 | Cloudy after 4·15 p.m. Two thunderstorms—one from N.W., and the other from S.W. Thunder, W., 5·55 p.m. Lightning, 6·7 p.m. Steady rain after 8 p.m. |
| 3 | 0·052 | 4·0 | 4·5 | 4·3 | Cloudy and dull. Light rain nearly all forenoon. |
| 4 | 0·123 | ... | ... | 2·8 | Cloudy and dull. Began to rain at 11·40 a.m. Light showers in afternoon and evening. |
| 5 | 0·082 | 4·0 | 4·5 | 4·3 | Cloudy and dull. Light rain at 6·45 a.m. |
| 6 | 0·100 | 4·0 | 5·0 | 4·5 | Fine after 5 p.m. Heavy rain from 5·10 a.m. until 6·30 a.m. |
| 7 | 0·178 | 3·5 | 5·0 | 4·3 | Forenoon fine from 10 a.m. until about 2 p.m. Evening fine after 8 p.m. Light clouds in the afternoon and warm. |
| 8 | 0·113 | 3·0 | 5·0 | 4·0 | Cloudy and dull. Shower at 6·5 p.m. Light rain dropping at 10·30 p.m. |
| 9 | 0·108 | 5·0 | 6·0 | 5·5 | Morning showery. Two thunderstorms, from N.W.; one at 3·11 p.m. until 5·35 p.m., the other from 6·30 p.m. until 8 p.m. Lightning all round, and drops of rain, at 3·27 p.m. |
| 10 | 0·222 | 5·0 | 5·5 | 5·3 | Cloudy and dull like rain. Dropping rain at 6·40 p.m. and 8 p.m. Heavy shower at 9·50 p.m. |
| 11 | 0·088 | ... | ... | 2·5 | Fine from 4 p.m. until 9·30 p.m.; afterwards cloudy and fine alternately. Meteor observed 8·33 p.m. N.E. |
| 12 | 0·218 | 2·5 | 5·0 | 3·8 | Warm. Light cloudy weather from 11 a.m. until towards evening. |
| 13 | 0·067 | 3·0 | 2·5 | 2·8 | Cloudy, very dull, with strong breeze from S. and S.S.W. Dropping rain at 1·30 p.m., and again at 5 p.m. Steady rain from 5·30 p.m. to 6 p.m. |
| 14 | 0·056 | 4·0 | ... | ... | Forenoon dull. Dropping rain at 9·25 a.m. Light shower at 11 a.m. Fine at 4 p.m. |
| 15 | 0·189 | 3·5 | 5·0 | 4·3 | Cloudy and dull. Fine at 9·45 p.m. Clouds began to clear at 8·30 p.m. |
| 16 | 0·206 | 4·0 | 3·0 | 3·5 | Morning fine. Cloudy and fine alternately after 8·15 p.m. Heavy shower at 6·35 p.m., and light shower 9·14 p.m. Lunar halo at 8·30 p.m. |
| 17 | 0·148 | 5·0 | 5·5 | 5·3 | Cloudy until 3 p.m. Heavy shower, 8·14 a.m., and raining lightly at 9 a.m. Light clouds formed about 8·45 p.m. |
| 18 | 0·197 | ... | ... | 2·0 | Fine in the forenoon for a while. Heavy clouds on horizon in the morning. Light cloudy weather afternoon and evening. |
| 19 | 0·217 | 3·0 | 3·5 | 3·3 | Forenoon cloudy, until about 1·30 p.m. Afternoon warm. Lunar halo at 8·10 p.m. Clouds forming again at 8·30 p.m. |
| 20 | 0·162 | 3·0 | 4·0 | 3·5 | Heavy clouds until after 1 p.m. Afternoon and evening fine. Light clouds formed about 5 p.m., and cleared again. |
| 21 | 0·194 | 4·5 | 5·0 | 4·8 | Morning fine and warm until 10 a.m.; light clouds rest of day. Rain dropping at 3·42 p.m. and 5·5 p.m. Partial rainbow, N.E., 6·42 p.m. S. gale and heavy shower, 7·6 p.m. |
| 22 | 0·110 | 5·0 | 4·0 | 4·5 | Cloudy, dull, and showery, until 5·35 p.m. |
| 23 | 0·206 | 3·0 | 4·5 | 3·8 | Cloudy and cool after 10 a.m. Partial clearing after 12 p.m., and turned cloudy again. |
| 24 | 0·292 | 4·0 | 5·0 | 4·5 | Morning dull. Fine after 1 p.m. until 8·30 p.m. Strong breeze in the afternoon and evening. |
| 25 | 0·111 | ... | ... | 2·8 | Cloudy and cool. Thunderstorm, 7·35 a.m. Rained from 7·15 a.m., until 9 a.m; another shower, 11·8 a.m. Lightning, 7·45 a.m. |
| 26 | 0·137 | 3·0 | 4·0 | 3·5 | Cloudy and dull. Morning cool. |
| 27 | 0·191 | ... | ... | 2·3 | Morning dull. Afternoon fine until the evening. |
| 28 | 0·222 | 3·0 | 3·5 | 3·3 | After 12·45 p.m. afternoon and evening fine and warm. Light rain dropping in the morning. |
| 29 | 0·136 | 2·5 | 3·5 | 3·0 | Cloudy until about 3 p.m. Clouds began to clear about noon. |
| Means | Sum. 4·238 | 3·7 | 4·5 | 3·8 | |

Cloudy sky taken at 9 a.m., 3 p.m., and 9 p.m. Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.

Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

Dew on the 7th, 12th, and 21st.

| Date. | Self-registering Barometer at 32°. | | | | | Self-registering Anemometer. | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mean. | Max. | Hour. | Min. | Hour. | S. | S.S.W. | S.W. | W.S.W. | W. | W.N.W. | N.W. | N.N.W. | N. | N.N.E. | N.E. | E.N.E. | E. | E.S.E. | S.E. | S.S.E. | Velocity. Total. Miles. | Velocity. Mean. pr. hr. | Mean Pressure. lbs. | Greatest Pressure. Direction of Wind. Time. |
| 1 | 29·700 | 29·745 | 9 & 10 p.m. | 29·650 | 4, 5, & 6 a.m. | 15 | ... | 1 | 2 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | 288 | 12·0 | 0·7 | 3·4 | S. | 7· 5 p.m. |
| 2 | ·617 | ·740 | 8 a.m. | ·465 | 6 p.m. | 10 | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | 8 | 3 | ... | ... | ... | ... | 410 | 17·1 | 1·5 | 7·2 | S. | 12· 0 a.m. |
| 3 | ·609 | ·725 | 9 a.m. | ·500 | 6, 7, & 8 a.m. | 12 | ... | 2 | 1 | 2 | 4 | ... | ... | ... | 1 | 2 | ... | ... | ... | ... | ... | 195 | 8·1 | 0·3 | 1·8 | S.S.W. | 11·10 a.m. |
| 4 | ·674 | ·830 | 8 a.m. | ·490 | 10 a.m. | 17 | ... | 2 | 1 | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | ... | 2 | 389 | 16·3 | 1·3 | 6·1 | S. | 5·25 p.m. |
| 5 | ·840 | ·900 | 9 p.m. | ·800 | 4 a.m. | 13 | ... | 1 | 2 | 2 | 2 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 3 | 275 | 11·5 | 0·7 | 3·1 | S. | 9·50 a.m. |
| 6 | ·683 | ·820 | 9 & 10 a.m. | ·585 | 4, 5, 6, 7, & 8 a.m. | ... | ... | 1 | ... | ... | ... | ... | 4 | 1 | ... | ... | 10 | 4 | 1 | ... | ... | 135 | 5·6 | 0·2 | 1·3 | E. | 5·30 p.m. |
| 7 | ·531 | ·675 | 8 a.m. | ·430 | 5 p.m. | 5 | 3 | ... | 1 | 2 | ... | ... | 1 | 1 | ... | 7 | 3 | 1 | ... | ... | ... | 249 | 10·4 | 0·5 | 3·4 | S.S.W. | 10·32 p.m. |
| 8 | ·795 | ·850 | 9 p.m. | ·725 | 9 a.m. | ... | 2 | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 6 | 7 | ... | 3 | 4 | 410 | 17·1 | 1·5 | 4·2 | E.N.E. | 8·20 a.m. |
| 9 | ..... | ..... | ..... | ..... | ..... | 5 | 8 | 1 | ... | ... | ... | ... | ... | ... | 2 | 1 | 6 | 1 | ... | ... | ... | 406 | 16·9 | 1·4 | 3·6 | S.S.W. | 4· 0 a.m. |
| 10 | 29·936 | 29·970 | 9 & 10 p.m. | 29·900 | 3 & 4 a.m. | ... | 24 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 512 | 21·4 | 2·3 | 7·2 | S.S.W. | 12·50 p.m. |
| 11 | ·864 | ·950 | 9, 10, & 11 a.m. | ·800 | 4, 5, & 6 a.m. | 2 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 17 | 1 | 1 | 1 | 143 | 6·0 | 0·2 | 1·3 | S. | 12· 5 p.m. |
| 12 | ·733 | ·855 | 8 a.m. | ·655 | 5 p.m. | 5 | 4 | ... | ... | ... | ... | ... | ... | 1 | 4 | 3 | 3 | 4 | ... | ... | ... | 462 | 19·3 | 1·9 | 8·0 | S.S.W. | 3·30 a.m. |
| 13 | ..... | ..... | ..... | ..... | ..... | 3 | 14 | 7 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 287 | 12·0 | 0·7 | 3·6 | S.S.W. | 10·30 a.m. |
| 14 | ..... | ..... | ..... | ..... | ..... | 4 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 5 | ... | 11 | 135 | 5·6 | 0·2 | 1·8 | S. | 8·50 a.m. |
| 15 | ..... | ..... | ..... | ..... | ..... | 14 | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 4 | 462 | 19·3 | 1·9 | 5·4 | S. | 12·38 p.m. |
| 16 | 29·994 | 30·050 | 1 p.m. | 29·945 | 3 & 4 a.m. | 8 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 7 | 5 | 253 | 10·5 | 0·6 | 3·1 | S.S.E. | 3·15 p.m. |
| 17 | ·904 | 29·975 | 9 a.m. | ·850 | 4 a.m. | ... | ... | ... | ... | ... | ... | ... | ... | 4 | ... | 7 | 9 | 3 | 1 | ... | ... | 200 | 8·3 | 0·3 | 2·4 | N.E. | 3·15 p.m. |
| 18 | ·887 | ·950 | 9 a.m. | ·835 | 4 p.m. | ... | ... | ... | ... | ... | ... | ... | ... | ... | 8 | 9 | 7 | ... | ... | ... | ... | 232 | 9·7 | 0·5 | 1·8 | E.N.E. | 4·53 p.m. |
| 19 | ·874 | ·935 | 9 a.m. | ·815 | 4 & 5 a.m. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 6 | 15 | 3 | ... | ... | 201 | 8·4 | 0·3 | 2·0 | E.N.E. | 3·45 p.m. |
| 20 | ·686 | ·840 | 9 a.m. | ·575 | 8 a.m. | ... | ... | ... | ... | ... | ... | ... | ... | 6 | 1 | ... | 7 | 10 | ... | ... | ... | 158 | 6·6 | 0·2 | 1·4 | E. | 9·45 a.m. |
| 21 | ..... | ..... | ..... | ..... | ..... | 10 | 4 | 2 | ... | ... | ... | ... | 1 | 1 | ... | 1 | 3 | ... | 1 | ... | 1 | 339 | 14·1 | 1·0 | 7·2 | S. | 7· 5 p.m. |
| 22 | 29·925 | 30·035 | 8 a.m. | 29·785 | 9 a.m. | 13 | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 8 | 322 | 13·4 | 0·9 | 3·6 | S.S.W. | 10· 5 a.m. |
| 23 | ..... | ..... | ..... | ..... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | ... | ... | 1 | 11 | 4 | 4 | 1 | 215 | 9·0 | 0·4 | 1·6 | E.S.E. | 1·50 p.m. |
| 24 | 29·862 | 30·030 | 9 a.m. | 29·765 | 5 a.m. | ... | 1 | 1 | ... | ... | ... | 2 | 1 | 1 | 14 | 2 | ... | 1 | 1 | ... | ... | 358 | 14·9 | 1·1 | 4·8 | N.N.E. | 8·45 p.m. |
| 25 | 30·053 | ·180 | 8 a.m. | ·900 | 9 a.m. | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | 17 | 304 | 12·7 | 0·8 | 3·6 | S.S.E. | 1·25 p.m. |
| 26 | ·221 | ·285 | 8 a.m. | 30·175 | 3 & 4 p.m. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 7 | 15 | 2 | 277 | 11·5 | 0·7 | 1·3 | S.E. | 12·35 p.m. |
| 27 | ·257 | ·285 | 11 a.m. | ·225 | 3 a.m. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4 | 11 | 7 | 2 | 250 | 10·4 | 0·5 | 1·4 | E. | 8·35 a.m. |
| 28 | ·178 | ·275 | 9 & 10 a.m. | ·100 | 4 a.m. | ... | ... | ... | ... | ... | ... | ... | ... | 5 | 1 | 3 | 13 | 1 | 1 | ... | ... | 203 | 8·5 | 0·4 | 1·6 | E. | 9·55 a.m. |
| 29 | ·038 | ·145 | 9 a.m. | 29·960 | 3 & 4 a.m. | ... | 1 | ... | ... | ... | ... | ... | ... | 2 | 3 | 2 | 1 | 10 | 3 | 1 | 1 | 159 | 6·6 | 0·2 | 1·1 | E.S.E. | 1·45 p.m. |
| Sums or Means. | 29·863 | Feb. 26th & 27th. 30·285 | 8 & 11 a.m. | Feb. 7th. 29·430 | 5 p.m. | 141 | 78 | 20 | 7 | 9 | 6 | 2 | 7 | 26 | 35 | 48 | 78 | 91 | 40 | 40 | 65 | Sum 8229 | Mean 11·8 | Mean. 0·8 | | | |

The self-registering Barometer is photographic, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot, is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour. Barometer results for 9th, 13th, 14th, 15th, 21st, and 23rd, are not given, owing to failure of photography.

# ABSTRACT FROM METEOROLOGICAL STATIONS,

## For the Month of FEBRUARY, 1872.

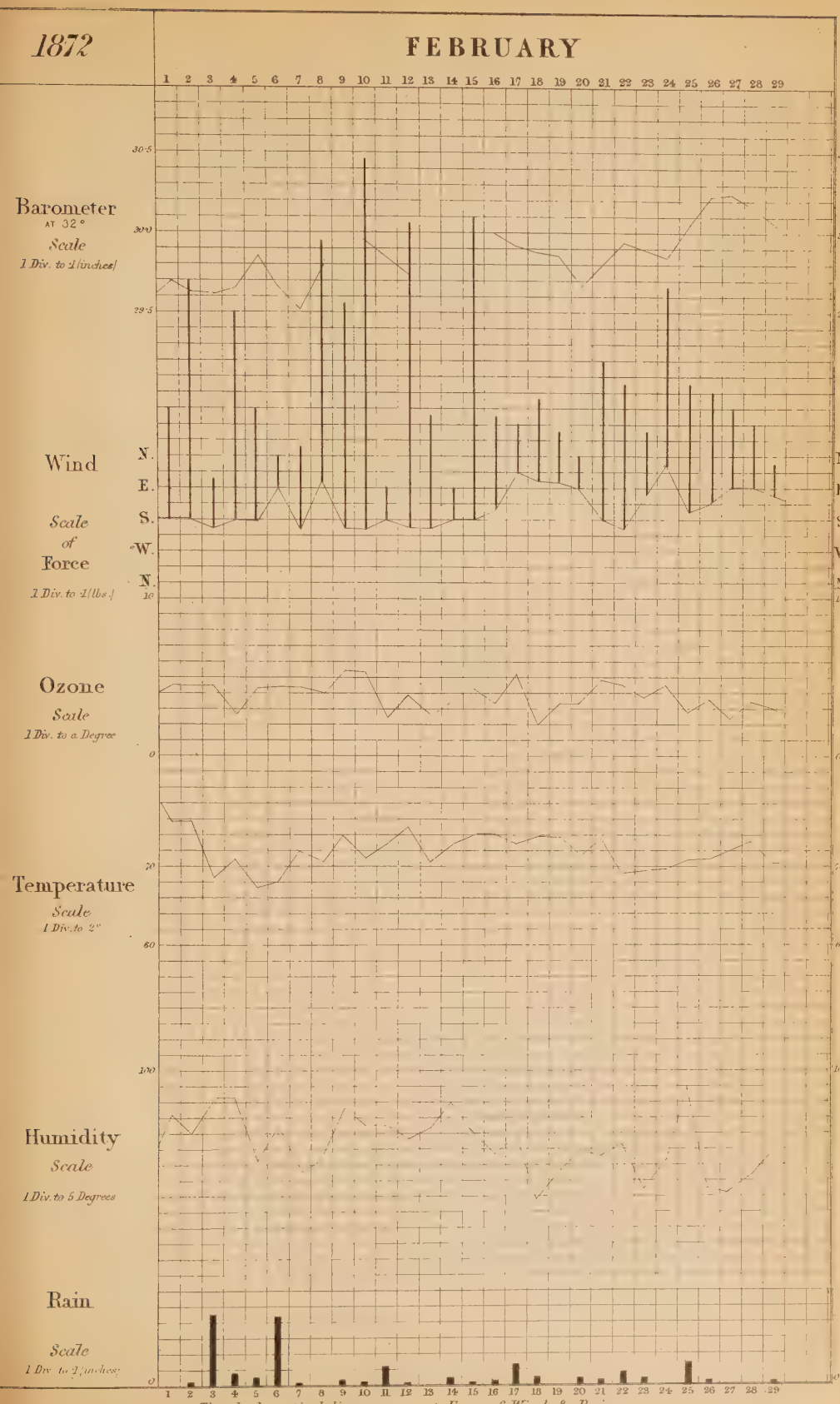
| Stations. | Least Distance from East Coast in miles. | Height above sea in feet. | Mean of Observations taken at 9 a.m., February, 1872. | | | | | | | | | For 24h, previous to 9 a.m. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Barometer. | Temperature in Shade. | Humidity 0 to 100. | Wind. | | Temperature in Shade. | | | | Rain. | | | | Evaporation in inches. |
| | | | | | | Direction. | Force 0-6 | Mean. Max. | Mean. Min. | Extreme Max | Extreme Min. | Total Fall, inches. | No. of Days | Greatest Fall, inches. | Date | |
| Tenterfield | 80 | ... | ... | 68·6 | ... | E.S.E. | 2·1 | 77·9 | 59·2 | 91·7 | 51·6 | 2·150 | 13 | 0·780 | 16 | 4·515 |
| Grafton | 22 | ... | ... | 78·1 | ... | S.E. | 1·7 | 86·3 | 69·8 | 97·2 | 60·7 | 7·372 | 15 | 2·280 | 6 | 4·886 |
| Bourke | 393 | ... | ... | ... | ... | N.E. | 0·1 | 92·6 | ... | 100·9 | ... | 3·460 | 6 | 2·720 | 4 | ... |
| Narrabri | 196 | ... | ... | 85·0 | ... | S.E. | 1·9 | 98·8 | 71·2 | 104·9 | 64·5 | 0·380 | 2 | 0·350 | 5 | 10·598 |
| Armidale | 80 | 3278 | 30·083 | 68·9 | 76·0 | E. | 1·5 | 78·1 | 59·7 | 88·2 | 52·1 | 4·290 | 9 | 1·580 | 16 | 4·670 |
| Port Macquarie | 1 | ... | ... | 74·6 | ... | S.S.W. | 2·1 | 80·8 | 68·3 | 84·9 | 61·5 | 7·620 | 17 | 1·840 | 5 | 4·505 |
| Murrurundi | 94 | 1545 | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Cassilis | 120 | ... | ... | 77·1 | ... | S.E. | 1·1 | 88·9 | 65·3 | 101·1 | 55·2 | 0·500 | 2 | 0·480 | 10 | 2·235 |
| Muswellbrook | 68 | 475 | ... | ... | ... | S.E. | 1·6 | ... | ... | ... | ... | 1·460 | 1 | 1·460 | 5 | 6·974 |
| Dubbo | 182 | ... | ... | ... | ... | N.W. | 1·0 | 85·8 | ... | 99·9 | ... | 2·930 | 3 | 1·670 | 4 | 8·833 |
| Mudgee | 121 | ... | ... | 76·0 | ... | S.E. | 1·5 | 87·0 | 65·0 | 97·4 | 57·0 | 1·620 | 4 | 1·250 | 11 | ... |
| Dalwood | 27 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | 3·520 | 11 | 1·170 | 9 | ... |
| West Maitland | 18 | ... | ... | 75·9 | ... | S.E. | 1·0 | 83·2 | 68·5 | 100·1 | 60·8 | 3·266 | 13 | 1·770 | 5 | 3·801 |
| Lambton | 6 | ... | ... | 73·8 | ... | S. | 1·6 | 83·5 | 64·0 | 100·3 | 56·0 | 3·920 | 14 | 1·230 | 11 | 4·472 |
| Newcastle | 1 | 112 | 30·012 | 73·1 | 81·0 | S.E. | 0·5 | 78·8 | 67·3 | 89·3 | 60·3 | 4·110 | 10 | 1·270 | 5 | ... |
| Orange | 124 | 2891 | ... | 68·2 | ... | E. | 1·9 | 77·6 | 58·8 | 87·7 | 50·5 | 2·190 | 6 | 0·610 | 4 | 3·899 |
| Bathurst | 96 | 2333 | 29·992 | 71·5 | 71·0 | N.E. | 0·9 | 87·3 | 55·7 | 99·0 | 45·0 | 2·380 | 4 | 0·850 | 22 | ... |
| Kurrajong | 36 | 1870 | ... | 62·9 | ... | E. | ... | 69·0 | 56·7 | 85·0 | 51·0 | 4·500 | 18 | 0·950 | 4 | ... |
| Mount Victoria | 61 | 3426 | 29·988 | 64·4 | 87·0 | S.E. | 0·2 | 73·9 | 54·8 | 92·5 | 47·9 | 3·410 | 23 | 1·150 | 4 | 4·515 |
| Woodford | 50 | 2192 | 30·076 | 65·3 | ... | N.E. | 0·0 | 71·6 | 59·0 | 87·4 | 53·4 | 4·790 | 21 | 1·720 | 3 | ... |
| Parramatta | 16 | ... | ... | 73·0 | ... | S. | 1·0 | 80·6 | 65·3 | 94·7 | 57·5 | 2·120 | 10 | 1·100 | 3 | ... |
| Sydney | 5 | 155 | 30·057 | 71·9 | 76·5 | S. | 0·8 | 77·8 | 65·9 | 83·0 | 59·8 | 1·648 | 19 | 0·425 | 3 | 4·238 |
| Liverpool | 15 | ... | 30·063 | 71·9 | ... | ..... | .. | 80·4 | 63·4 | 98·0 | 54·0 | 1·400 | 18 | 0·595 | 3 | ... |
| Wentworth | 476 | ... | ... | 76·9 | ... | S. | 2·2 | 89·9 | 63·8 | 105·5 | 50·8 | 0·250 | 3 | 0·130 | 21 | ... |
| Wilton | 13 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | 3·370 | 6 | 1·820 | 3 | ... |
| Cordeaux River | 12 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | 3·710 | 12 | 1·420 | 3 | ... |
| Young | 140 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Wollongong | 0 | ... | ... | 72·1 | ... | S. | 1·4 | 78·2 | 66·0 | 84·4 | 60·2 | 1·140 | 3 | 0·430 | 24 | 4·903 |
| Moss Vale | 50 | ... | ... | 66·1 | ... | S. | 1·0 | 74·1 | 58·0 | 93·4 | 50·8 | 2·560 | 10 | 1·110 | 3 | ... |
| Goulburn | 54 | 2129 | 30·065 | 67·1 | 72·0 | N.E. | 0·1 | 79·8 | 54·2 | 93·9 | 43·8 | 2·150 | 7 | 0·950 | 4 | 5·222 |
| Terrara | 4 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | 3·270 | 14 | 1·360 | 3 | ... |
| Wagga Wagga | 161 | ... | ... | 75·0 | ... | S.E. | 1·4 | 86·4 | 63·6 | 96·1 | 54·9 | 1·530 | 2 | 1·200 | 2 | 6·190 |
| Cape St. George | 0 | 175 | 30·025 | 69·8 | 75·0 | S. | 1·4 | 76·4 | 63·1 | 92·2 | 57·6 | 3·052 | 18 | 1·100 | 3 | ... |
| Queanbeyan | 60 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Urana | 218 | ... | ... | 69·8 | ... | N.E. | ... | 81·5 | 58·1 | 97·1 | 45·1 | 1·550 | 1 | 1·550 | 1 | 4·712 |
| Deniliquin | 287 | 410 | 30·117 | 76·6 | 65·0 | S. | 1·3 | 95·0 | 58·1 | 105·1 | 45·2 | 0·170 | 3 | 0·110 | 3 | ... |
| Kiandra | 88 | 4640 | 30·005 | 56·8 | 77·0 | S.E. | 0·4 | 70·8 | 42·8 | 79·9 | 31·8 | 3·150 | 4 | 1·260 | 1 | ... |
| Cooma | 52 | 2637 | ... | ... | ... | N. | 2·2 | ... | 51·8 | ... | 39·8 | 1·500 | 3 | 0·630 | 3 | 3·088 |
| Albury | 175 | 572 | ... | 74·4 | ... | W. | 0·6 | 91·2 | 57·5 | 102·4 | 49·3 | 1·750 | 7 | 0·900 | 3 | 9·482 |
| Eden | 0 | 107 | 30·130 | 70·1 | 64·0 | S.W. | 1·2 | 79·0 | 61·1 | 99·0 | 55·1 | 1·150 | 7 | 0·340 | 3 | ... |

Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only twelve of the stations have barometers.

## REMARKS.

Grafton—Stormy, 5th, 16th, and 17th.
Bourke—Thunderstorms, 3rd, 14th, 15th, 24th, and 25th.
Armidale—Thunderstorms, 9th and 10th. S. gale, with hail, on 22nd.
Port Macquarie—Thunderstorms, 4th and 25th. Squally, on 28th.
Muswellbrook—Heavy thunderstorm, 4th.
Mudgee—Heavy hail and rain on 10th.
West Maitland—Thunderstorm, 9th and 25th.
Lambton—Thunderstorms, 21st, 22nd, and 26th.
Newcastle—Stormy, 3rd and 22nd.
Orange—Thunderstorms, 3rd, 5th, 15th, and 23rd.
Kurrajong—Thunderstorms, 2nd, 3rd, and 9th.
Mount Victoria—Thunderstorms, 2nd, 9th, and 25th.
Parramatta—Heavy thunderstorm, 2nd.
Sydney—Thunderstorms, 2nd, 9th, and 25th. S. gale, 21st.
Liverpool—Aneroid Barometer—Thunderstorms, 2nd, 9th, and 25th. S. squall, 21st.
Cordeaux River—Thunderstorms, 2nd and 25th.
Moss Vale—Thunderstorms, 9th and 25th.
Goulburn—High wind, 7th, Thunderstorm, 25th.
Terrara—Thunderstorm, 2nd.
Cape St. George—Thunderstorms, 3rd and 13th. S. gales, 3rd, 5th, 9th, 22nd, 23rd, and 25th.
Urana—Heavy thunderstorm, 2nd. Rain wanted.
Deniliquin—Heavy S. gale, at 7·30 p.m. on 24th.
Kiandra—Thunderstorms, 1st, 9th, 10th, and 24th.
Cooma—Thunderstorms, 1st and 2nd.
Albury—Thunderstorm, 2nd.
Eden—S.W. gale, 21st.

# METEOROLOGICAL CURVES




*The dark vertical lines represent Force of Wind & Rain.*

Lithographed at the Surveyor Generals Office Sydney March 1872

*Dew on the 7th, 12th & 21st*

# METEOROLOGICAL OBSERVATIONS

MADE AT THE

# GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

# ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

# MONTH OF MARCH, 1872;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1872.

[*Price*, 6*d*.] 3*u* 17—72

# METEOROLOGICAL OBSERVATIONS.

## GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s

Magnetic Variation 9° 32′ 41″ East.

## MARCH, 1872.

### GENERAL ABSTRACT.

| | | | |
|---|---|---|---|
| **BAROMETER** .. At 32° Fah. | Highest Reading ... ... | 30·130 | ... On the 6th, at 9 a.m. and 10 a.m. |
| | Lowest Reading ... ... | 29·375 | ... On the 27th, at 1 p.m. |
| | Mean Height ... ... | 29·807 | |

(Being 0·101 in. less than that in the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **WIND** .. .. | Greatest Pressure... ... | 13·5 lbs. | ... On the 27th. |
| | Mean Pressure ... ... | 0·7 lbs. | |
| | Number of Days Calm ... | 0 | |
| | Prevailing Direction ... | S. | |

(Prevailing direction during the same month for the preceding 13 years E. by N.)

| | | | |
|---|---|---|---|
| **TEMPERATURE** | Highest in the Shade ... | 79·0 | ... On the 5th. |
| | Lowest in the Shade ... | 56·1 | ... On the 30th. |
| | Greatest Range ... ... | 17·9 | ... On the 22nd. |
| | Highest in the Sun ... | 121·0 | ... On the 3rd. |
| | Highest in a Black Box with Glass Top ... ... | 189·0 | ... On the 6th. |
| | Lowest on the Grass ... | 50·1 | ... On the 30th. |
| | Mean Diurnal Range ... | 11·9 | |
| | Mean in the Shade ... | 68·0 | |

(Being 1·1 less than that of the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **HUMIDITY** .. | Greatest Amount... ... | 97·0 | ... On the 29th. |
| | Least ... ... ... | 45·0 | ... On the 26th. |
| | Mean ... ... ... | 77·0 | |

(Being 1·0 greater than that of the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **RAIN** .. .. | Greatest Fall ... ... | 2·539 inches. | On the 30th. |
| | Number of Days ... ... | 17 rain and 6 dew. | |
| | Total Fall ... ... | 5·172 inches. | 65 ft. above the ground. |
| | | 6·270 inches. | 15 inches above the ground. |

(Being 0·293 inch greater than that of the same month on an average of the preceding 13 years.)

| | | |
|---|---|---|
| **EVAPORATION** | Total Amount ... ... | 3·873 inches. |
| **OZONE** .. .. | Mean Amount ... ... | 3·9 |

(Being 1·0 less than that in the same month on an average of the preceding 12 years.)

| | | |
|---|---|---|
| **ELECTRICITY** .. | Number of Days Lightning | 5 |
| **CLOUDY SKY** .. | Mean Amount ... ... | 6·7 |
| | Number of Clear Days ... | 1 |
| **METEORS** .. | Number Observed ... | 3 |

### REMARKS.

At Sydney, the Barometer was only 0·101 in. below, and the temperature 1·1 below the average. Cloudy weather and southerly wind prevailed during the month, especially the latter half. Rain fell on 17 days, and amounted to 6·270 in. On the coast heavy rain fell, amounting to upwards of 7 inches at Newcastle, Lambton, and Cordeaux River; but inland, rain was much wanted at many places, and only 0·230 inches fell at Wentworth. 46 thunderstorms occurred during the month.

## SYDNEY, MARCH, 1872.

| Date. | Moon's Phases. | Standard Barometer at 9 a.m., corrected to Mean Sea Level. | Wind. | | Temperature. | | | | | | | | | Humidity. 0-100. | Rain. Inches. | Cl'dy Sky. 0-10. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Dry. | Wet. | Shade. | | | | Sun. | Grass. | Sea Water. 9 a.m. | | | |
| | | | Prevailing Direction. | Total Velocity. Miles. | Mean 9.3.9. | Mean 9.3.9. | Max. | Min. | Range | Mean. | Max. | Min. | | Mean 9.3.9. | | |
| 1 | | 30·199 | S.E. | 213 | 71·9 | 65·1 | 78·1 | 62·2 | 15·9 | 70·2 | 114·6 | 58·2 | 70·7 | 67·0 | 0·002 | 6·7 |
| 2 | | ·157 | E.S.E. | 155 | 70·3 | 66·5 | 74·1 | 64·6 | 9·5 | 69·4 | 92·2 | 60·1 | 70·5 | 79·3 | ·0 | 10·0 |
| 3 | Last Qr. | ·136 | E. | 180 | 71·8 | 69·7 | 78·4 | 65·6 | 12·8 | 72·0 | 121·0 | 60·9 | 70·7 | 88·0 | 0·143 | 10·0 |
| 4 | | ·217 | E. | 167 | 74·4 | 68·0 | 78·1 | 67·0 | 11·1 | 72·6 | 120·5 | 63·0 | 70·5 | 69·0 | ·0 | 8·7 |
| 5 | G. S. Dec. | ·274 | E.S.E. | 159 | 72·2 | 67·5 | 79·0 | 65·9 | 13·1 | 72·5 | 119·0 | 62·2 | 70·3 | 76·0 | 0·028 | 8·3 |
| 6 | | ·321 | N.E. | 219 | 73·0 | 67·0 | 78·4 | 66·7 | 11·7 | 72·6 | 120·9 | 62·1 | 70·5 | 72·0 | 0·105 | 4·3 |
| 7 | Perigee. | ·267 | N.E. | 221 | 70·8 | 64·5 | 76·1 | 63·3 | 12·8 | 69·7 | 116·6 | 58·1 | 70·1 | 69·0 | 0·074 | 3·0 |
| 8 | | ·144 | N.N.E. | 190 | 70·9 | 65·3 | 77·1 | 59·6 | 17·5 | 68·4 | 117·9 | 55·1 | 70·9 | 70·7 | 0·001 | 0·3 |
| 9 | New Moon | ·077 | S. | 224 | 70·9 | 67·1 | 76·0 | 61·2 | 14·8 | 68·6 | 107·0 | 56·4 | 70·7 | 80·0 | 0·002 | 7·3 |
| 10 | | ·075 | S. | 235 | 64·8 | 63·8 | 68·0 | 62·8 | 5·2 | 65·4 | 83·8 | 58·7 | 71·1 | 93·0 | 0·820 | 10·0 |
| 11 | In Equat. | ·165 | S. | 269 | 66·6 | 63·2 | 70·7 | 60·4 | 10·3 | 65·6 | 104·6 | 55·4 | 70·9 | 81·0 | 0·127 | 10·0 |
| 12 | | ·207 | E.N.E. | 209 | 68·5 | 62·9 | 73·7 | 61·8 | 11·9 | 67·8 | 120·0 | 57·1 | 71·1 | 71·7 | 0·540 | 5·3 |
| 13 | | ·111 | N.E. | 240 | 69·0 | 65·1 | 73·1 | 62·7 | 10·4 | 67·9 | 114·0 | 58·3 | 70·9 | 78·7 | 0·484 | 8·7 |
| 14 | | 29·967 | E. | 267 | 69·7 | 67·5 | 74·0 | 63·8 | 10·2 | 68·9 | 115·4 | 58·5 | 70·7 | 87·3 | 0·102 | 9·7 |
| 15 | | ·859 | N.E. | 196 | 70·9 | 68·2 | 75·4 | 64·2 | 11·2 | 69·8 | 118·4 | 58·7 | 70·9 | 85·0 | 0·043 | 5·3 |
| 16 | | ·854 | N.E. | 244 | 71·5 | 69·7 | 75·7 | 64·4 | 11·3 | 70·0 | 114·1 | 60·2 | 70·7 | 90·0 | 0·001 | 3·3 |
| 17 | First Qr. | ·781 | S. | 369 | 67·6 | 66·6 | 77·0 | 64·6 | 12·4 | 70·8 | 114·0 | 60·9 | 70·9 | 94·0 | 0·002 | 10·0 |
| 18 | G.N.Dec. Apogee. | 30·027 | S.S.W. | 500 | 68·8 | 64·7 | 74·1 | 65·7 | 8·4 | 69·9 | 113·8 | 59·2 | 70·7 | 77·7 | 0·004 | 7·7 |
| 19 | | ·087 | S. | 483 | 68·0 | 62·5 | 71·8 | 64·2 | 7·6 | 68·0 | 106·0 | 59·6 | 70·9 | 71·0 | 0·090 | 8·3 |
| 20 | | ·056 | S.S.W. | 392 | 66·7 | 61·4 | 71·0 | 61·0 | 10·0 | 66·0 | 111·0 | 57·3 | 70·7 | 71·3 | 0·450 | 9·0 |
| 21 | | ·107 | W. | 282 | 66·8 | 62·1 | 72·2 | 58·5 | 13·7 | 65·4 | 109·5 | 53·8 | 70·5 | 74·7 | ·0 | 5·0 |
| 22 | | ·079 | W. | 138 | 67·7 | 62·6 | 74·8 | 56·9 | 17·9 | 65·9 | 112·7 | 52·2 | 70·7 | 73·0 | ·0 | 3·7 |
| 23 | | 29·995 | W.S.W. | 177 | 67·4 | 63·1 | 75·0 | 58·6 | 16·4 | 66·8 | 111·6 | 54·7 | 70·5 | 77·0 | 0·002 | 3·3 |
| 24 | | ·889 | W.S.W. | 181 | 69·0 | 65·0 | 76·2 | 63·0 | 13·2 | 69·6 | 113·0 | 58·2 | 70·7 | 78·0 | ·0 | 9·0 |
| 25 | Full Moon. In Equat. | ·779 | S. | 118 | 71·3 | 67·2 | 76·6 | 63·6 | 13·0 | 70·1 | 114·0 | 57·7 | 70·5 | 78·3 | ·0 | 5·0 |
| 26 | | ·685 | W. | 479 | 66·5 | 59·4 | 76·1 | 63·5 | 12·6 | 69·8 | 113·8 | 59·1 | 70·7 | 66·0 | 0·520 | 3·7 |
| 27 | | ·633 | W. | 435 | 65·8 | 57·2 | 71·7 | 57·0 | 14·7 | 64·4 | 110·1 | 52·1 | 70·5 | 57·0 | ·0 | 6·0 |
| 28 | | 30·006 | S.E. | 199 | 66·6 | 60·3 | 70·9 | 58·8 | 12·1 | 64·9 | 100·6 | 53·3 | 70·7 | 67·0 | ·0 | 7·0 |
| 29 | | ·166 | S.S.W. | 377 | 62·0 | 61·6 | 62·8 | 60·3 | 2·5 | 61·6 | 87·5 | 56·3 | 70·3 | 97·0 | 0·185 | 10·0 |
| 30 | | ·033 | W.S.W. | 599 | 62·5 | 58·8 | 65·6 | 56·1 | 9·5 | 60·9 | 97·9 | 50·1 | 70·4 | 78·0 | 2·539 | 10·0 |
| 31 | | 29·991 | W.S.W. | 173 | 64·0 | 58·4 | 70·7 | 56·7 | 14·0 | 63·7 | 110·3 | 52·1 | 70·3 | 69·0 | 0·006 | 0·0 |
| | | | | Sum. | | | | | | | | | | | Sum. | |
| Means | ..... | 30·043 | S. | 8290 | 68·6 | 64·3 | 73·9 | 62·1 | 11·9 | 68·0 | 110·5 | 57·4 | 70·7 | 77·0 | 6·270 | 6·4 |

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.

The Barometer at 9 a.m. reads 0·041 above the true mean for the day.

## SYDNEY, MARCH, 1872.

| Date. | Evaporation. Inches. | Ozone, 0-10. Day. | Night. | Mean. | Remarks. |
|---|---|---|---|---|---|
| 1 | 0·162 | 2·5 | 2·0 | 2·3 | Afternoon and evening fine until about 8 p.m. and turned cloudy again. |
| 2 | 0·048 | 5·0 | 4·5 | 4·8 | Cloudy day and dull. Showery until 3·20 p.m. |
| 3 | 0·186 | ... | ... | 2·3 | Morning cloudy and dull. Light shower at 8·29 a.m. Warm in the afternoon. |
| 4 | 0·129 | 2·5 | 4·5 | 3·5 | Cloudy, dull, and warm. Fine at 4·30 p.m. Cloudy again towards evening. Light rain at 7·15 p.m., also during the night. |
| 5 | 0·119 | 3·5 | 4·0 | 3·8 | Cloudy. Light rain at 8·25 a.m. Raining again in the evening from 8·25 p.m. until 9·15 p.m. Fine between 2·30 p.m. and 3·15 p.m. |
| 6 | 0·236 | 4·5 | 5·0 | 4·8 | Morning cloudy until after 8·25 a.m. Afternoon and evening after 4 p.m. cloudy and fine alternately. Heavy shower at 8·27 p.m. |
| 7 | 0·164 | 3·0 | 5·0 | 4·0 | Cloudy until after 11 a.m. Warm. Meteor observed S.E. at 8·55 p.m. |
| 8 | 0·190 | 3·0 | 3·5 | 3·3 | Fine. Smoky looking in the forenoon. Meteor observed N.W. at 8·35 p.m. |
| 9 | ..... | 4·0 | 5·5 | 4·8 | Cloudy and dull after 9·30 a.m. Light shower 12·8 p.m., also two showers in succession, commencing at 8 p.m. Lightning all round. Thunder N.E. at 8·28 p.m. |
| 10 | 0·124 | ... | ... | 3·5 | Cloudy day and dull. Steady rain in morning until 9 a.m., afterwards showery until 2·3 p.m. |
| 11 | 0·169 | 4·0 | 6·5 | 5·3 | Cloudy day, also showery in the afternoon and evening. Partial rainbow S.E. at 5·40 p.m. |
| 12 | 0·114 | 4·0 | 6·0 | 5·0 | Fine in the afternoon from 12·30 p.m. until 4 p.m. Evening showery and turned fine after 8·30 p.m. Rainbow E. 4·46 p.m., and partial rainbow 5·55 p.m. |
| 13 | 0·082 | 3·5 | 4·5 | 4·0 | Cloudy and showery all morning. Towards evening turned fine. Cloudy again at 8·45 p.m. Lightning S.W. 8·7 p.m. Light rain 9·15 p.m. |
| 14 | 0·069 | 4·5 | 5·0 | 4·8 | Cloudy, dull, and dropping rain at intervals. Thunderstorm N.W. from 2 p.m. until 5·30 p.m. Another storm S.E. from 9·44 until 10·15 p.m. Lightning all round during evening. |
| 15 | 0·098 | 4·0 | 4·5 | 4·3 | Cloudy and very warm. Thunderstorm with lightning at 5 a.m. Thunder N.E. at 1·40 p.m. Dropping rain at 3·12 p.m. |
| 16 | 0·123 | 4·5 | 5·0 | 4·8 | Morning foggy. Warm during day. Cloudy in the evening until 10·30 p.m. |
| 17 | 0·184 | ... | ... | 2·5 | Dense fog all morning. Forenoon fine from 9·30 a.m. Strong breeze from the S. all day. |
| 18 | 0·249 | 4·5 | 5·0 | 4·8 | Afternoon fine until 4 p.m. Light rain dropping at 5·49 p.m., and light steady rain at 8·15 p.m. Strong breeze from S. during the day. |
| 19 | ..... | 6·0 | 7·0 | 6·5 | Cloudy and showery until 6·45 p.m. Strong S. wind blowing all day. Partial rainbow E. 5·25 p.m. Began to clear about 8 p.m. |
| 20 | 0·164 | 2·5 | 4·0 | 3·3 | Fine in the afternoon from 4 p.m. until about 6·30 p.m. Strong breeze from the S. and dull. Lunar halo at 9·43 p.m. |
| 21 | 0·180 | 3·0 | 5·0 | 4·0 | Fine after 11 a.m. Evening clear and very light breeze; blowing fresh during the forenoon and afternoon. |
| 22 | 0·112 | 2·5 | 4·0 | 3·3 | Cloudy in the evening. Light breeze blowing all day. Dew fell in the night. |
| 23 | 0·108 | 3·0 | 4·5 | 3·8 | Morning cloudy and dull. Fine at 11·15 a.m. Light breeze during day; almost calm in evening. Observed meteor, 8·3 p.m. S.E. |
| 24 | 0·116 | ... | ... | 2·0 | Cloudy. Morning dull. Light shower at 8·20 a.m. Light breeze all day. |
| 25 | 0·101 | 3·0 | 4·5 | 3·8 | Cloudy and fine alternately. Morning warm. Light breeze all day. |
| 26 | 0·210 | 4·0 | 3·5 | 3·8 | Forenoon cloudy and fine alternately. Afternoon and evening fine. Thunderstorm at 4·25 a.m. Heavy shower 4·30 a.m. Strong W. wind all afternoon and evening. |
| 27 | 0·228 | 3·0 | 4·5 | 3·8 | Cloudy from 2·15 p.m. until 4·30 p.m.; evening also cloudy. Very strong W. wind all day. Dropping rain at 8·18 p.m. |
| 28 | ..... | 3·0 | 4·5 | 3·8 | Fine between 8 a.m. and 11 a.m., also from 5 p.m. until 5·30 p.m. Dropping rain at intervals between 11·54 a.m. and 1 p.m. Light breeze all day. Evening dull. |
| 29 | ..... | ... | ... | 4·8 | Raining from 3·45 a.m. until 11·45 p.m., except at short intervals. Lightning N.W. during the evening. |
| 30 | 0·094 | 4·0 | 4·5 | 4·3 | Morning fine until about 8 a.m. and cool. S.W. gale all evening, with light showers at intervals, since 12·15 p.m. |
| 31 | 0·114 | ... | ... | 2·0 | Afternoon cloudy. Light breeze all day, also cool. Dew fell in the night. |
| | Sum. | | | | |
| Means | 3·873 | 3·6 | 4·6 | 3·9 | |

Cloudy sky taken at 9 a.m., 3 p.m., and 9 p.m. Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.

Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

Dew on the 1st, 8th, 9th, 16th, 17th, and 23rd.

| Date. | Self-registering Barometer at 32°. | | | | | Self-registering Anemometer. | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mean. | Max. | Hour. | Min. | Hour. | S. | S.S.W. | S.W. | W.S.W. | W. | W.N.W. | N.W. | N.N.W. | N. | N.N.E. | N.E. | E.N.E. | E. | E.S.E. | S.E. | S.S.E. | Velocity. Total. Miles. | Velocity. Mean. pr. hr. | Mean Pressure. lbs. | Greatest Pressure. Direction of Wind. Time. | | |
| 1 | 29·962 | 30·025 | 9 a.m. | 29·920 | 3 a.m. | 3 | ... | ... | 2 | 3 | .. | ... | ... | 1 | ... | ... | ... | ... | ... | 10 | 5 | 213 | 8·9 | 0·4 | 1·8 | S.S.E. | 12· 8 p.m. |
| 2 | 29·919 | 29·960 | 9 & 10 a.m. | ·900 | 2, 3, 4, 5, & 6 pm; 2 3 & 4 a.m. | 4 | ... | ... | ... | 2 | ... | .. | ... | ... | ... | ... | 1 | ... | 12 | 3 | 2 | 155 | 6·5 | 0·2 | 2·0 | E.S.E. | 2· 0 p.m. |
| 3 | 29·975 | 30·040 | 8 a.m. | ·930 | 3 p.m. | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 10 | 11 | 1 | 1 | ... | 180 | 7·5 | 0·3 | 1·6 | E. | 1·38 a.m. |
| 4 | 30·021 | 30·060 | 8 a.m. | ·985 | 4 p.m. | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 3 | 9 | 1 | 3 | 5 | 167 | 7·0 | 0·3 | 1·1 | E. | 10·22 a.m. |
| 5 | .... | ..... | ..... | ..... | ..... | ... | ... | ... | 2 | ... | 1 | ... | 1 | ... | ... | ... | 2 | 2 | 8 | 4 | 4 | 159 | 6·6 | 0·2 | 2·4 | E. | 8·34 p.m. |
| 6 | 30·073 | 30·130 | 9 & 10 a.m. | 30·035 | 3, 4, & 5 a.m. | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 9 | 7 | 5 | 2 | ... | ... | 219 | 9·1 | 0·4 | 2·0 | E. | 6· 0 p.m. |
| 7 | 29·983 | 30·070 | 9 a.m. | 29·925 | 4 & 5 a.m. | ... | ... | ... | ... | ... | ... | ... | ... | 6 | 6 | 12 | ... | ... | ... | ... | ... | 221 | 9 2 | 0·4 | 2·0 | N.E. | 1·30 p.m. |
| 8 | 29·845 | 29·950 | 9 a.m. | ·800 | 5 & 6 p.m. | ... | ... | ... | 1 | 1 | 2 | ... | ... | 4 | 6 | 5 | 5 | ... | ... | ... | ... | 190 | 7·9 | 0·3 | 2·2 | N.E. | 6· 8 p.m. |
| 9 | 29·860 | 29·895 | 9 & 10 a.m. | ·830 | 5 a.m. | 14 | ... | 2 | 4 | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 224 | 9·3 | 0·4 | 1·3 | S.S.E. | 5· 8 p.m. |
| 10 | 29·885 | 29·940 | 8 a.m. | ·845 | 4 & 6 p.m. | 13 | 2 | ... | 1 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 6 | 235 | 9·8 | 0·5 | 1·6 | S.S.E. | 2·35 p.m. |
| 11 | 29·967 | 30·000 | 8, 9, & 10 p.m. | ·935 | 2 & 3 p.m. | 7 | 2 | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 3 | 5 | 4 | 1 | 269 | 11·2 | 0·6 | 2·4 | S. | 1· 5 p.m. |
| 12 | 29·937 | 30·005 | 9 & 10 a.m. | ·880 | 4 & 5 a.m. | ... | ... | ... | ... | 1 | 2 | 1 | ... | 3 | ... | 1 | 9 | 5 | 2 | ... | ... | 209 | 8·7 | 0·4 | 1·4 | N. | 2·25 a.m. |
| 13 | 29·809 | 29·910 | 9 & 10 a.m. | ·755 | 3, 4, & 5 a.m. | ... | ... | ... | ... | 1 | ... | ... | ... | 3 | 1 | 13 | 4 | 2 | ... | ... | ... | 240 | 10·0 | 0·5 | 3·1 | E.N.E. | 6· 7 p.m. |
| 14 | 29·692 | 29·775 | 9 a.m. | ·620 | 2 a.m. | ... | ... | ... | ... | 4 | 2 | 1 | 1 | 3 | 1 | 3 | 3 | 6 | ... | ... | ... | 267 | 11·1 | 0·6 | 3·6 | N.E. | 5·50 p.m. |
| 15 | 29·677 | 29·710 | 8 & 9 p.m. | ·645 | 4 p.m. | ... | ... | ... | ... | 1 | 1 | ... | ... | 6 | 2 | 9 | 1 | 4 | ... | ... | ... | 196 | 8·2 | 0·3 | 2·0 | N.E. | 12·45 p.m. |
| 16 | 29·594 | 29·675 | 9 a.m. | ·550 | 3 & 4 a.m. | ... | ... | ... | ... | 4 | 1 | ... | ... | 7 | 2 | 8 | ... | 2 | ... | ... | ... | 244 | 10·2 | 0·5 | 3·1 | N.E. | 4·12 p.m. |
| 17 | 29·723 | 29·830 | 8 a.m. | ·620 | 1 & 2 p.m. | 15 | 3 | 2 | 2 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 369 | 15·4 | 1·2 | 8·0 | S. | 4·25 p.m. |
| 18 | 29·844 | 29·900 | 8 a.m. | ·800 | 3 & 4 p.m. | 9 | 15 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 500 | 20·8 | 2·2 | 4·5 | S.S.W. | 3·33 p.m. |
| 19 | 29·845 | 29·900 | 9 & 10 a.m. | ·800 | 3, 4, & 5 a.m. | 10 | 5 | 9 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 483 | 20·1 | 2·0 | 5·8 | S. | 1·45 p.m. |
| 20 | ..... | ..... | ..... | ..... | ..... | 1 | 10 | 5 | 3 | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 392 | 16·3 | 1·3 | 5·8 | S.S.W. | 11·47 a.m. |
| 21 | 29·866 | 29·910 | 9 a.m. | 29·840 | 3, 4, & 5 p.m. | 8 | 4 | ... | 1 | 10 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 282 | 11·8 | 0·7 | 3·1 | S.S.W. | 10· 0 a.m. |
| 22 | 29·799 | 29·900 | 9 & 10 a.m. | ·765 | 3 a.m. | 1 | 2 | 2 | 2 | 9 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 5 | 138 | 5·8 | 0·2 | 0·6 | S.S.E. | 3·48 p.m. |
| 23 | 29·727 | 29·800 | 9 & 10 a.m. | ·695 | 5 a.m. | 5 | 2 | 1 | 6 | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 | 177 | 7·4 | 0·3 | 0·8 | S. | 4·37 p.m. |
| 24 | 29·638 | 29·705 | 9 a.m. | ·585 | 4 a.m. | 6 | 6 | ... | 10 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 181 | 7·5 | 0·3 | 0·8 | S.S.E. | 5· 0 p.m. |
| 25 | 29·530 | 29·600 | 9 a.m. | ·485 | 7 a.m. | 5 | 1 | ... | 3 | 4 | 2 | 1 | ... | ... | ... | ... | ... | 4 | 2 | 1 | 1 | 118 | 4·9 | 0·1 | 0·8 | W. | 4·30 a.m. |
| 26 | 29·465 | 29·530 | 9 p.m. | ·400 | 2 p.m. | ... | ... | ... | 4 | 14 | 3 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 479 | 20·0 | 2·0 | 9·7 | W. | 2·42 p.m. |
| 27 | 29·569 | 29·800 | 8 a.m. | ·375 | 1 p.m. | ... | ... | ... | 2 | 21 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 435 | 18·1 | 1·6 | 13·5 | W. | 12·55 p.m. |
| 28 | ..... | ..... | ..... | ..... | ..... | 2 | 1 | ... | 1 | ... | 5 | ... | ... | ... | ... | ... | ... | ... | ... | 10 | 5 | 199 | 8·3 | 0·4 | 1·3 | S.E. | 3·50 p.m. |
| 29 | 29·881 | 29·965 | 10 a.m. | 29·800 | 4 & 5 a.m. | 3 | 6 | 5 | 1 | 4 | 1 | ... | ... | ... | ... | ... | ... | 2 | ... | ... | 2 | 377 | 15·7 | 1·2 | 12·0 | S. | 11·38 p.m. |
| 30 | 29·761 | 29·840 | 9 a.m. | ·705 | 3 & 4 p.m. | ... | 5 | 3 | 10 | 6 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 599 | 25·0 | 3·1 | 10·6 | S.S.W. | 8·45 p.m. |
| 31 | 22·749 | 29·800 | 9 a.m. | ·700 | 2, 3, & 4 p.m. | 5 | 4 | 2 | 7 | 4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 173 | 7·2 | 0·3 | 1·3 | S.S.W. | 10·50 a.m. |
| Sums or Means. | 29·807 | March 6th. 30·130 | 9 & 10 a.m. | March 27th. 29·375 | 1 p.m. | 112 | 68 | 32 | 64 | 104 | 24 | 6 | 2 | 34 | 18 | 62 | 45 | 55 | 33 | 38 | 47 | Sum 8290 | Mean. 11·1 | Mean. 0·7 | | | |

The self-registering Barometer is photographic, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot, is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour. Barometer results for 5th, 20th, and 28th, are not given, owing to failure of photography.

# ABSTRACT FROM METEOROLOGICAL STATIONS,

## For the Month of MARCH, 1872.

| Stations. | Least Distance from East Coast in miles. | Height above sea in feet. | Mean of Observations taken at 9 a.m., March, 1872. | | | | | | | | | For 24h, previous to 9 a.m. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Barometer. | Temperature in Shade. | Humidity 0 to 100. | Wind. | | Clouds. 0-10. | Temperature in Shade. | | | | Rain. | | | | Evaporation in inches. |
| | | | | | | Direction. | Force. 0-6 | | Mean. Max. | Mean. Min. | Extreme Max. | Extreme Min. | Total Fall, inches. | No. of Days | Greatest Fall, inches. | Date | |
| Tenterfield | 80 | ... | ... | 63·3 | ... | S.S.E. | 1·9 | 6·8 | 72·2 | 54·4 | 78·9 | 38·6 | 2·910 | 13 | 1·420 | 11 | 3·963 |
| Grafton | 22 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Bourke | 393 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Narrabri | 196 | ... | ... | 76·6 | ... | S.E. | 1·9 | ... | 91·8 | 61·4 | 98·9 | 47·5 | 0·430 | 4 | 0·270 | 26 | 10·157 |
| Armidale | 80 | 3278 | 30·100 | 61·0 | 79·0 | E. | 1·4 | 5·9 | 69·7 | 52·2 | 77·2 | 42·1 | 3·130 | 8 | 1·300 | 30 | 2·716 |
| Port Macquarie | 0 | ... | ... | 69·6 | ... | S.S.W. | 1·9 | 4·9 | 76·4 | 62·7 | 79·7 | 52·1 | 5·900 | 16 | 1·740 | 21 | 9·904 |
| Murrurundi | 94 | 1545 | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Cassilis | 120 | ... | ... | 69·4 | ... | E. | 0·8 | ... | 81·2 | 57·5 | 89·1 | 46·2 | 1·670 | 5 | 0·540 | 15 | 2·939 |
| Muswellbrook | 68 | 475 | ... | ... | ... | W. | 1·5 | ... | ... | ... | ... | ... | 2·260 | 6 | 0·520 | * | 4·591 |
| Dubbo | 182 | ... | ... | 69·7 | ... | N.W. | 0·8 | ... | 79·8 | 59·5 | 85·9 | 49·9 | 0·260 | 4 | 0·160 | 10 | 7·406 |
| Mudgee | 121 | ... | ... | 67·7 | ... | E. | 1·4 | ... | 79·0 | 56·3 | 87·4 | 49·0 | 1·220 | 3 | 0·570 | 15 | ... |
| Dalwood | 27 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 2·090 | 13 | 1·100 | 19 | ... |
| West Maitland | 18 | ... | ... | 69·9 | ... | S.E. | 1·1 | ... | 77·5 | 62·2 | 87·0 | 57·6 | 2·635 | 12 | 1·260 | 19 | 4·888 |
| Lambton | 7 | ... | ... | 66·6 | ... | E. | 1·7 | ... | 76·8 | 56·3 | 98·3 | 45·0 | 7·680 | 13 | 2·800 | 19 | 3·418 |
| Newcastle | 1 | 112 | 30·006 | 69·8 | 77·0 | S.W. | 0·2 | 4·8 | 76·3 | 63·2 | 83·3 | 55·8 | 7·120 | 14 | 2·250 | 30 | ... |
| Orange | 124 | 2891 | ... | 61·3 | ... | E. | 2·2 | ... | 70·7 | 51·8 | 77·0 | 43·2 | 1·020 | 8 | 0·340 | 26 | 3·937 |
| Bathurst | 96 | 2200 | 30·014 | 64·7 | 70·0 | S.E. | 1·0 | 6·0 | 80·9 | 48·5 | 89·0 | 31·0 | 1·200 | 5 | 0·480 | 15 | ... |
| Kurrajong | 35 | 1870 | ... | 58·9 | ... | E. | ... | ... | 65·1 | 52·7 | 74·0 | 45·0 | 6·150 | 12 | 2·400 | 10 | ... |
| Mount Victoria | 61 | 3496 | 30·039 | 58·3 | 86·0 | E. | 0·1 | 6·1 | 67·7 | 48·9 | 79·1 | 40·7 | 2·150 | 12 | 0·360 | 6 | 1·494 |
| Woodford | 50 | 2192 | 30·072 | 63·0 | ... | S.E. | 0·1 | ... | 67·3 | 58·6 | 75·4 | 50·4 | 3·640 | 16 | 0·650 | 30 | ... |
| Parramatta | 16 | ... | ... | 68·8 | ... | S.W. | 1·0 | ... | 76·7 | 60·8 | 81·5 | 53·4 | 3·690 | 15 | 1·180 | 30 | ... |
| Sydney | 5 | 155 | 30·043 | 68·0 | 77·0 | S. | 0·7 | 6·7 | 73·9 | 62·1 | 79·0 | 56·1 | 6·270 | 17 | 2·539 | 30 | 3·873 |
| Liverpool | 16 | ... | 30·044 | 66·9 | ... | ..... | ... | ... | 75·3 | 58·5 | 81·0 | 50·0 | 3·944 | 16 | 1·010 | 30 | ... |
| Wentworth | 476 | ... | ... | 73·6 | ... | S.W. | 2·2 | ... | 86·2 | 61·0 | 101·3 | 46·5 | 0·230 | 2 | 0·180 | 25 | 8·428 |
| Wilton | 13 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 3·460 | 7 | 1·680 | 30 | ... |
| Cordeaux River | 10 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 7·180 | 13 | 2·860 | 30 | ... |
| Young | 140 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Wollongong | 0 | ... | ... | 68·1 | ... | S. | 1·7 | ... | 74·2 | 61·9 | 84·4 | 53·7 | 2·190 | 5 | 0·760 | 30 | 4·986 |
| Moss Vale | 31 | ... | ... | 61·5 | ... | E. | 1·0 | ... | 69·2 | 53·7 | 78·4 | 46·8 | 4·620 | 13 | 2·590 | 30 | ... |
| Goulburn | 54 | 2129 | 29·980 | 67·2 | 72·0 | N.E. | 0·1 | 7·4 | 79·8 | 54·6 | 93·9 | 43·8 | 2·150 | 7 | 0·950 | 4 | 5·171 |
| Terrara | 0 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 5·570 | 14 | 3·300 | 30 | ... |
| Wagga Wagga | 161 | ... | ... | 68·5 | ... | S.E. | 1·0 | ... | 78·8 | 58·1 | 91·1 | 43·9 | 2·870 | 3 | 1·640 | 10 | 5·321 |
| Cape St. George | 0 | 175 | 29·990 | 66·9 | 72·0 | S.E. | 1·5 | 5·7 | 72·6 | 61·2 | 83·2 | 48·6 | 5·805 | 15 | 3·100 | 30 | ... |
| Queanbeyan | 60 | ... | ... | 53·9 | ... | S. | 0·3 | ... | 65·8 | 42·0 | 74·2 | 28·1 | 0·850 | 4 | 0·390 | 15 | 4·889 |
| Urana | 218 | ... | ... | 66·2 | ... | N.W. | ... | ... | 79·9 | 52·5 | 96·1 | 45·1 | 1·600 | 1 | 1·600 | 29 | 5·708 |
| Deniliquin | 287 | 410 | 30·122 | 73·5 | 67·0 | S.E. | 1·4 | 1·6 | 91·3 | 55·6 | 105·1 | 40·2 | 0·570 | 1 | 0·570 | 26 | ... |
| Kiandra | 88 | 4640 | 30·018 | 51·2 | 71·0 | S.E. | 0·8 | 4·3 | 66·1 | 30·3 | 76·5 | 23·7 | 4·000 | 6 | 1·700 | 26 | ... |
| Cooma | 52 | 2637 | ... | ... | ... | S. | 2·2 | ... | ... | 46·0 | ... | 32·3 | 1·340 | 4 | 0·520 | 27 | 2·099 |
| Albury | 175 | 572 | ... | 70·6 | ... | E. | 0·5 | ... | 88·8 | 52·3 | 99·4 | 47·3 | 1·280 | 5 | 0·670 | 30 | 7·632 |
| Eden | 0 | 107 | 29·992 | 67·6 | 63·0 | S.W. | 1·4 | 5·4 | 74·6 | 60·6 | 81·0 | 53·1 | 1·920 | 9 | 0·630 | 30 | ... |

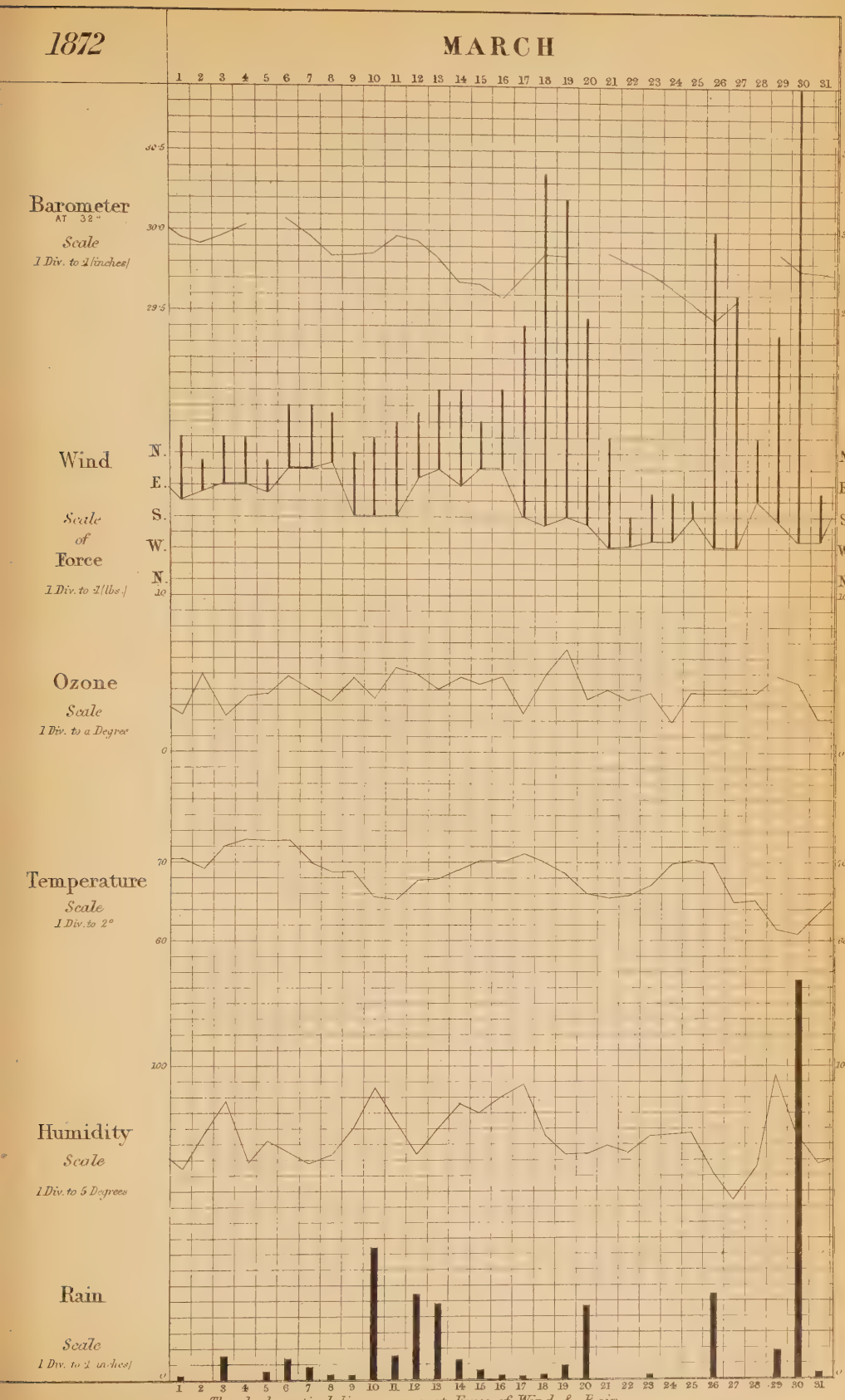
* 10th and 30th.

Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only twelve of the stations have barometers.

## REMARKS.

Tenterfield—Heavy thunderstorm, 11th.
Narrabri—Very dry weather. Whooping Cough prevalent.
Armidale—Heavy hailstorm, 19th. Heavy thunderstorm, 30th, 2 a.m.
Port Macquarie—Thunderstorms, 15th and 30th. Squally, 10th, 11th, 12th, and 19th.
Cassilis—Thunderstorm, 15th.
Muswellbrook—Heavy storms, 14th, 15th, and 30th.
Dubbo—Thunderstorm, 10th. Strong and cold wind, S.S.W., 25th.
Mudgee—Stormy, 14th, 15th, and 26th.
Lambton—Thunderstorms during month.
Newcastle—Stormy, 21st. S.E. squalls, 11th and 20th. Lunar rainbow, 18th.
Orange—Thunderstorms, 9th, 13th, 14th, 15th, and 30th. Three meteors observed.
Bathurst—Thunderstorms, 14th and 15th.
Kurrajong—Thunderstorms, 14th and 25th. Squalls, 26th and 27th.
Mount Victoria—Thunderstorms, 9th, 26th, and 27th. Foggy, 29th.
Parramatta—Thunderstorm, 26th. Foggy, 16th.
Sydney—Thunderstorms, 14th, 15th, and 26th. Foggy, 16th.
Liverpool—Foggy, 7th, 8th, and 25th. Thunderstorm, 26th. Squally, 30th.
Wentworth—Hot, early part of month.
Cordeaux River—Thunderstorms, 14th and 15th. Heavy W. gale, 27th and 28th.
Moss Vale—Thunderstorm, 14th. Foggy, 22nd. Squally, 30th.
Goulburn—Heavy thunderstorms, 2nd and 25th. Strong wind, 7th.
Terrara—Strong W. wind, 26th and 27.
Cape St. George—Rain squalls frequent. S.E. gales, 20th, 21st, 30th, and 31st.
Queanbeyan—Thunderstorm, 15th and 25th.
Urana—Thunderstorm, 29th.
Deniliquin—Flight of grasshoppers, 15th. Squalls, 16th and 27th. Storm, 29th.
Kiandra—Thunderstorms, 8th and 13th. Foggy, 27th.
Cooma—Thunderstorms, 13th and 29th.
Albury—Thunderstorms, 13th, 14th, and 29th. Squally, 26th and 27th.
Eden—Thick fog, 16th. A brilliant meteor, 18th.

# METEOROLOGICAL CURVES




*The dark vertical lines represent Force of Wind & Rain.*

Lithographed at the Surveyor Generals Office Sydney. April. 1872

*Dew on the 1st 8th 9th 16th 17th & 23rd — Force of Wind on 30th 3.1 lbs.*

# METEOROLOGICAL OBSERVATIONS

MADE AT THE

# GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

# ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

# MONTH OF APRIL, 1872;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1872.

[Price, 6d.] 3a 23—72

# METEOROLOGICAL OBSERVATIONS.

## GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s

Magnetic Variation 9° 32′ 41″ East.

## APRIL, 1872.

### GENERAL ABSTRACT.

| | | | | |
|---|---|---|---|---|
| **BAROMETER** .. At 32° Fah. | Highest Reading ... | ... 30·105 | ... | On the 12th, at 10 a.m. |
| | Lowest Reading ... | ... 29·550 | ... | On the 24th, at 4 a.m. |
| | Mean Height ... | ... 29·858 | | |

(Being 0·181 in. less than that in the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **WIND** .. .. | Greatest Pressure... ... | 22·4 lbs.... | On the 27th. |
| | Mean Pressure ... ... | 0·6 lbs. | |
| | Number of Days Calm ... | 0 | |
| | Prevailing Direction ... | W. | |

(Prevailing direction during the same month for the preceding 13 years W.)

| | | | |
|---|---|---|---|
| **TEMPERATURE** | Highest in the Shade ... | 75·2 | ... On the 5th. |
| | Lowest in the Shade ... | 47·6 | ... On the 23rd. |
| | Greatest Range ... ... | 20·3 | ... On the 13th. |
| | Highest in the Sun ... | 116·0 | ... On the 2nd. |
| | Highest in a Black Box with Glass Top ... ... | 180·0 | ... On the 1st. |
| | Lowest on the Grass ... | 42·7 | ... On the 23rd. |
| | Mean Diurnal Range ... | 13·5 | |
| | Mean in the Shade ... | 62·1 | |

(Being 3·1 less than that of the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **HUMIDITY** .. | Greatest Amount... ... | 100·0 | ... On the 27th. |
| | Least ... ... ... | 51·0 | ... On the 22nd. |
| | Mean ... ... ... | 76·7 | |

(Being 0·6 less than that of the same month on an average of the preceding 13 years.)

| | | |
|---|---|---|
| **RAIN** .. .. | Greatest Fall ... ... | 1·014 inches. On the 28th. |
| | Number of Days ... ... | 10 rain and 11 dew. |
| | Total Fall ... ... | 1·399 inches. 65 ft. above the ground.<br>2·081 inches. 15 inches above the ground. |

(Being 6·007 inches less than that of the same month on an average of the preceding 13 years.)

| | | |
|---|---|---|
| **EVAPORATION** | Total Amount ... ... | 3·145 inches. |
| **OZONE** .. .. | Mean Amount ... ... | 4·1 |

(Being 0·8 less than that in the same month on an average of the preceding 12 years.)

| | | |
|---|---|---|
| **ELECTRICITY** .. | Number of Days Lightning | 4 |
| **CLOUDY SKY** .. | Mean Amount ... ... | 4·9 |
| | Number of Clear Days ... | 3 |
| **METEORS** .. | Number Observed ... | 5 |

### REMARKS.

This month has been remarkably cold, with prevalent westerly winds and steady barometer.

The rainfall is 6 inches below the average of 13 years at Sydney; and at the Stations nearly all that are more than 20 miles from the coast have had less than ½ an inch rain, while those that are on the coast have had from one to three inches. 28 thunderstorms were recorded; and frost at some of the Stations.

## SYDNEY, APRIL, 1872.

| Date. | Moon's Phases. | Standard Barometer at 9 a.m., corrected to Mean Sea Level. | Wind. | | Temperature. | | | | | | | | | Humidity. 0-100. | Rain. | Cl'dy Sky. 0-10. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Dry. | Wet. | Shade. | | | | Sun. | Grass. | Sea Water. | | | |
| | | | Prevailing Direction. | Total Velocity. Miles. | Mean 9.3.9. | Mean 9.3.9. | Max. | Min. | Range | Mean. | Max. | Min. | 9 a.m. | Mean 9.3.9. | Inches. | Taken at 9, 3 & 9. |
| 1 | G.S.Dec. Last Qr. | 29·983 | E.N.E. | 146 | 64·7 | 59·7 | 74·2 | 57·7 | 16·5 | 66·0 | 115·3 | 52·1 | 70·6 | 72·0 | ·0 | 0·0 |
| 2 | | ·989 | S. | 351 | 66·8 | 61·7 | 72·0 | 60·2 | 11·8 | 66·1 | 116·0 | 55·6 | 70·5 | 71·7 | 0·001 | 10·0 |
| 3 | | 30·116 | S. | 281 | 63·7 | 59·2 | 67·1 | 59·9 | 7·2 | 63·5 | 104·0 | 54·5 | 70·3 | 75·0 | ·0 | 2·7 |
| 4 | | ·007 | N.E. | 189 | 65·6 | 62·3 | 70·8 | 54·9 | 15·9 | 62·9 | 110·1 | 50·6 | 70·5 | 81·3 | 0·001 | 4·3 |
| 5 | | 29·883 | W. | 183 | 66·4 | 61·7 | 75·2 | 58·9 | 16·3 | 67·1 | 113·1 | 53·1 | 70·3 | 75·0 | 0·001 | 2·0 |
| 6 | | 30·009 | W. | 208 | 65·3 | 60·3 | 73·8 | 56·0 | 17·8 | 64·9 | 112·9 | 52·0 | 70·1 | 72·7 | 0·001 | 0·3 |
| 7 | In Equat. | ·044 | W. | 201 | 62·3 | 56·4 | 72·1 | 56·0 | 16·1 | 64·1 | 110·8 | 50·1 | 69·9 | 67·0 | 0·001 | 0·0 |
| 8 | New Moon | ·154 | N. | 222 | 67·7 | 63·8 | 72·3 | 59·0 | 13·3 | 65·7 | 111·9 | 54·7 | 69·7 | 78·7 | 0· | 0·3 |
| 9 | | ·070 | E. | 186 | 67·8 | 65·1 | 73·1 | 58·1 | 15·0 | 65·6 | 110·6 | 54·4 | 69·9 | 84·3 | 0·003 | 5·0 |
| 10 | Perigee. | ·122 | S. | 365 | 64·2 | 60·4 | 71·2 | 59·0 | 12·2 | 65·1 | 107·7 | 54·3 | 69·5 | 77·3 | 0·001 | 8·0 |
| 11 | | ·217 | S.S.W. | 371 | 60·6 | 55·9 | 64·7 | 55·3 | 9·4 | 60·0 | 103·1 | 51·9 | 69·3 | 72·7 | 0·208 | 5·0 |
| 12 | | ·310 | W. | 237 | 61·6 | 57·0 | 66·1 | 53·7 | 12·4 | 59·9 | 105·7 | 48·7 | 69·5 | 74·0 | 0·003 | 0·7 |
| 13 | | ·214 | W.S.W. | 225 | 64·2 | 59·8 | 72·9 | 52·6 | 20·3 | 62·8 | 112·0 | 48·2 | 69·3 | 75·7 | 0·003 | 0·3 |
| 14 | | ·138 | S. | 245 | 61·0 | 57·0 | 67·3 | 55·0 | 12·3 | 61·2 | 103·0 | 48·9 | 69·1 | 76·0 | ·0 | 9·0 |
| 15 | G.N.Dec. Apogee. | ·250 | W. | 224 | 60·9 | 56·1 | 66·2 | 54·3 | 11·9 | 60·3 | 103·8 | 49·1 | 68·9 | 73·0 | 0·004 | 3·3 |
| 16 | First Qr. | ·253 | W. | 207 | 62·0 | 57·1 | 69·1 | 53·1 | 16·0 | 61·1 | 112·7 | 48·1 | 69·1 | 72·0 | ·0 | 5·3 |
| 17 | | ·309 | N.N.E | 117 | 63·3 | 59·7 | 68·5 | 54·0 | 14·5 | 61·3 | 99·3 | 49·3 | 68·7 | 79·0 | ·0 | 6·7 |
| 18 | | ·233 | W.N.W. | 187 | 64·0 | 59·3 | 68·8 | 57·8 | 11·0 | 63·3 | 107·1 | 52·4 | 68·9 | 74·3 | 0·008 | 5·2 |
| 19 | | ·237 | E. | 137 | 62·4 | 59·0 | 69·4 | 53·5 | 15·9 | 61·5 | 112·5 | 49·1 | 69·0 | 80·3 | 0·001 | 7·0 |
| 20 | | ·208 | N.N.W. | 210 | 62·6 | 59·7 | 69·5 | 53·6 | 15·9 | 61·6 | 108·1 | 49·4 | 68·7 | 82·7 | 0·002 | 0·0 |
| 21 | | ·055 | W. | 260 | 63·5 | 61·3 | 66·2 | 55·2 | 11·0 | 60·7 | 101·3 | 51·4 | 68·8 | 86·0 | 0·001 | 10·0 |
| 22 | In Equat. | ·027 | W. | 199 | 58·0 | 52·8 | 68·1 | 49·6 | 18·5 | 58·9 | 106·0 | 45·1 | 68·8 | 71·0 | ·0 | 0·0 |
| 23 | Full Moon | ·049 | W. | 155 | 59·8 | 55·2 | 67·7 | 47·6 | 20·1 | 57·7 | 105·1 | 42·7 | 68·4 | 73·3 | ·0 | 6· |
| 24 | | 29·303 | W.N.W. | 111 | 62·3 | 59·5 | 66·0 | 55·2 | 10·8 | 60·6 | 99·0 | 52·7 | 68·7 | 82·7 | 0·001 | 9· |
| 25 | | ·793 | W.S.W. | 210 | 62·4 | 58·6 | 73·7 | 54·8 | 18·9 | 64·3 | 110·1 | 50·9 | 68·5 | 78·3 | 0·014 | 3· |
| 26 | | ·842 | W.S.W. | 402 | 60·8 | 56·1 | 66·1 | 55·3 | 10·8 | 60·7 | 91·3 | 49·1 | 68·2 | 73·0 | 0·110 | 10· |
| 27 | Perigee. | ·848 | S. | 654 | 61·2 | 57·9 | 63·8 | 55·7 | 8·1 | 59·8 | 78·0 | 51·4 | 68·0 | 81·7 | 0·645 | 10· |
| 28 | G. S. Dec. | 30·153 | S.W. | 426 | 57·4 | 55·8 | 62·5 | 53·6 | 8·9 | 58·1 | 98·6 | 50·1 | 68·1 | 89·0 | 1·014 | 9· |
| 29 | | ·164 | S.W. | 332 | 58·0 | 54·1 | 61·9 | 55·6 | 6·3 | 58·8 | 78·4 | 50·8 | 67·9 | 75·7 | 0·058 | 10· |
| 30 | Last Qr. | ·104 | N.E. | 147 | 59·5 | 55·3 | 66·0 | 55·0 | 11·0 | 60·5 | 111·2 | 51·3 | 67·5 | 75·0 | ·0 | 3· |
| Means | ..... | 30·089 | W. | Sum. 7388 | 62·7 | 58·6 | 68·9 | 55·3 | 13·5 | 62·1 | 105·3 | 50·7 | 69·2 | 76·7 | Sum. 2·081 | 4· |

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.

The Barometer at 9 a.m. reads 0·041 above the true mean for the day.

## SYDNEY, APRIL, 1872.

| Date. | Evaporation. Inches. | Ozone, 0-10. Day. | Night. | Mean. | Remarks. |
|---|---|---|---|---|---|
| 1 | 0·112 | ... | ... | 2·0 | Fine and warm. Light clouds formed in the evening. |
| 2 | 0·150 | 3·5 | 4·0 | 3·8 | Forenoon cloudy and fine alternately. Afternoon and evening dull, like rain. Fresh breeze during the day. |
| 3 | 0·106 | 3·0 | 5·5 | 4·3 | Cloudy and dull until 11 a.m., and again from noon until 2·30 p.m. Cool throughout the day, and dew falling in the evening. |
| 4 | 0·106 | 3·0 | 4·0 | 3·5 | Cloudy in evening from 9 p.m. until about 10 p.m. Dew fell in the night. |
| 5 | 0·110 | 3·5 | 5·5 | 4·5 | Afternoon cloudy after 2·30 p.m. Forenoon warm. Lightning from S.S.W. to S.E. during evening. Dew fell in the night. |
| 6 | 0·136 | 3·0 | 5·0 | 4·0 | Fine throughout and warm. Light dew falling in the evening. Meteor observed N. at 8·44 p.m. |
| 7 | 0·104 | ... | ... | 2·8 | Fine throughout and warm. Light dew fell in the night. |
| 8 | 0·107 | 3·0 | 4·5 | 3·8 | Evening cloudy between 5 and 7 p.m. Very light rain at 8·42 a.m. Heavy dew fell in the night. |
| 9 | 0·092 | 4·0 | 4·5 | 4·3 | Cloudy from noon until about 5·30 p.m. Lightning all evening, S.W., S.E., E., & N.E. Light dew fell in the night. |
| 10 | 0·124 | 3·5 | 5·5 | 4·5 | Fine from 8·45 a.m. until 9·20 a.m. Dropping rain at 11·5 a.m. A shower at 9 p.m., and another 10·5 p.m. Lightning all evening, S., E., and N.E. |
| 11 | 0·143 | 2·5 | 4·5 | 3·5 | Cloudy and fine alternately. Heavy shower at 6·45 a.m.; light shower at 5·5 p.m., and dropping rain at 7·46 p.m. Rainbow S.E. at 5 p.m. |
| 12 | 0·084 | 3·0 | 5·5 | 4·3 | Cloudy and fine alternately until 1 p.m. Evening cool, hazy to W., and dew falling. |
| 13 | 0·108 | 2·5 | 5·0 | 3·8 | Fine throughout and warm. Smoky looking. |
| 14 | 0·140 | ... | ... | 2·5 | Cloudy and dull until about noon. Dropping rain at 8·30 a.m. |
| 15 | 0·080 | 3·5 | 5·0 | 4·3 | Cloudy and dull until noon. Two meteors observed, one E. at 8·11 p.m., and the other E. at 10·12 p.m. |
| 16 | 0·102 | 3·0 | 4·5 | 3·8 | Cloudy from noon until after 3 p.m., and again after 8 p.m. |
| 17 | 0·050 | 4·0 | 4·5 | 4·3 | Fine from 2·30 p.m. until after 3 p.m., and again in the evening until 9 p.m. Light shower at 8·39 a.m. Dropping rain 12·25 p.m., and light shower in the night. |
| 18 | 0·080 | 3·0 | 5·5 | 4·3 | Fine after 6·30 p.m. Lunar halos 7·30 p.m. and 7·45 p.m. Morning warm. Light dew fell in the night. |
| 19 | 0·084 | 3·0 | 4·5 | 3·8 | Morning fine (and warm) until 11·30 a.m., and again after 9·50 p.m. Light clouds all afternoon and evening. |
| 20 | 0·080 | 3·0 | 5·0 | 4·0 | Fine throughout. Evening very clear. Forenoon and afternoon warm. |
| 21 | 0·108 | ... | ... | 3·0 | Cloudy. Light shower at 9·28 a.m. Light dew fell in the night. |
| 22 | 0·110 | 3·5 | 5·0 | 4·3 | Cloudy from 11 a.m. until about 2 p.m. (light clouds). Evening beautifully clear, and light dew falling. Cool all day. |
| 23 | 0·063 | 3·5 | 4·5 | 4·0 | Fine from 7·30 a.m. until about noon. Evening foggy to W. Ring round moon 7·30 p.m. Bright meteor observed S.E. at 8·40 p.m. |
| 24 | 0·012 | 4·0 | 3·0 | 3·5 | Fine between 5 p.m. and 7 p.m. Dull during the day—like rain. Light shower between 11·15 a.m. and 11·55 a.m. Heavy dew in the night. |
| 25 | 0·132 | 3·5 | 4·5 | 4·0 | Fine from 8 a.m. until noon; also after 8·30 p.m. Heavy shower 1·35 p.m. Lightning S. and S.E. all evening. |
| 26 | 0·144 | 3·5 | 5·0 | 4·3 | Evening fine until 7·45 p.m. Cool all day. Morning dull—like rain. |
| 27 | 0·239 | 10·0 | 10·0 | 10·0 | Evening fine until after 8·30 p.m. Stormy and cold all day. Heavy showers during the forenoon. Rainbow S.E. 3·55 p.m. |
| 28 | 0·103 | ... | ... | 3·5 | Cloudy, dull, and showery during the day. Evening cold, and partial clearing of clouds at intervals. |
| 29 | 0·090 | 4·0 | 4·5 | 4·3 | Cloudy, and very dull, looking like rain. |
| 30 | 0·046 | 4·0 | 5·0 | 4·5 | Fine, and warm after 1 p.m. Dull, like rain, in the morning. Meteor observed N. at 8·9 p.m. Dew fell in the night. |
| Sum. | | | | | |
| Means | 3·145 | 3·6 | 5·0 | 4·1 | |

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.

Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

Heavy dew fell on 2nd, 4th, 5th, 6th, 7th, 9th, 10th, 13th, 19th, 20th, and 21st.

| Date. | Self-registering Barometer at 32°. | | | | | Self-registering Anemometer. | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mean. | Max. | Hour. | Min. | Hour. | S. | S.S.W. | S.W. | W.S.W. | W. | W.N.W. | N.W. | N.N.W. | N. | N.N.E. | N.E. | E.N.E. | E. | E.S.E. | S.E. | S.S.E. | Velocity. Total. Miles. | Velocity. Mean. pr. hr. | Mean Pressure. lbs. | Greatest Pressure. Direction of Wind. Time. | | |
| 1 | 29·722 | 29·780 | 9 a.m. | 29·680 | 4 p.m. | ... | ... | 3 | 1 | 2 | 3 | ... | ... | ... | 1 | 6 | 6 | 2 | ... | ... | ... | 146 | 6·1 | 0·2 | 1·6 | E.N.E. | 3·35 p.m. |
| 2 | ..... | ..... | ..... | ..... | ..... | 11 | 2 | 2 | 1 | ... | .. | .. | ... | ... | ... | ... | ... | ... | ... | 4 | 4 | 351 | 14·6 | 1·1 | 2·2 | S.S.E. | 4·35 p.m. |
| 3 | 29·849 | 29·915 | 9 a.m. | 29·800 | 3, 4, & 6 a.m. | 7 | 3 | 4 | ... | 6 | 4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | .. | 281 | 11·7 | 0·7 | 3·1 | S.S.W. | 1· 0 p.m. |
| 4 | 29·669 | 29·805 | 9 a.m. | 29·625 | 4 a.m. | ... | ... | ... | ... | 4 | 4 | ... | ... | 2 | 2 | 8 | 3 | 1 | ... | ... | ... | 189 | 7·9 | 0·3 | 2·0 | E.N.E | 3·22 p.m. |
| 5 | 29·711 | 29·805 | 8 a.m. | 29·650 | 2, 4, & 5 p.m. | 2 | 2 | ... | 1 | 10 | 1 | ... | ... | ... | ... | ... | ... | ... | 6 | 2 | ... | 183 | 7·6 | 0·3 | 0·8 | S. | 12·53 a.m. |
| 6 | 29·784 | 29·845 | 8 a.m. | 29·710 | 4 & 5 p.m. | ... | ... | ... | 1 | 8 | 3 | 1 | 3 | 1 | ... | 5 | 2 | ... | ... | ... | ... | 208 | 8·7 | 0·4 | 1·8 | N.E. | 5·30 p.m. |
| 7 | 29·902 | 29·965 | 8 a.m. | 29·840 | 3 p.m. | 7 | ... | ... | ... | 14 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | 201 | 8·4 | 0·4 | 1·8 | S. | 3·15 p.m. |
| 8 | 29·864 | 29·950 | 9 a.m. | 29·820 | 4 & 5 p.m. | ... | ... | ... | ... | 3 | 2 | ... | 2 | 8 | 2 | 3 | 2 | 2 | ... | ... | ... | 222 | 9·3 | 0·4 | 2·0 | N. | 8· 7 p.m. |
| 9 | 29·840 | 29·900 | 8 a.m. | 29·760 | 4 & 5 p.m. | 3 | 3 | 1 | 3 | 4 | ... | ... | ... | ... | ... | ... | 2 | 6 | ... | ... | 2 | 186 | 7·8 | 0·3 | 0·7 | E.N.E. | 1·53 p.m. |
| 10 | 29·930 | 30·000 | 8 a.m. | 29·870 | 4 p.m. | 16 | 4 | ... | 1 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 365 | 15·2 | 1·2 | 3·9 | S. | 3·23 p.m. |
| 11 | 30·037 | 30·090 | 8 a.m. | 30·000 | 9 a.m. to 4 p.m. | ... | 9 | 2 | 6 | 7 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 371 | 15·5 | 1·2 | 4·5 | S.S.W. | 2·13 p.m. |
| 12 | 30·028 | 30·105 | 10 a.m. | 29·975 | 4, 5, & 6 a.m. | 4 | 4 | 1 | ... | 11 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4 | 237 | 9·9 | 0·5 | 2·0 | S.S.W. | 9·36 a.m. |
| 13 | 29·893 | 30·000 | 9 &10a.m. | 29·850 | 4 & 5 p.m. | ... | ... | 2 | 7 | 4 | ... | 4 | ... | ... | 3 | 2 | 1 | 1 | ... | ... | ... | 225 | 9·4 | 0·4 | 1·4 | N.E. | 5·27 p.m. |
| 14 | 29·958 | 30·040 | 8 a.m. | 29·900 | 1 2, & 3 p.m. | 10 | 2 | ... | 3 | 4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 245 | 10·2 | 0·5 | 2·9 | . | 7·30 p.m. |
| 15 | 30·004 | 30·050 | 9 a.m. | 29·960 | 4 & 5 p.m. | 5 | 3 | 1 | 1 | 11 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | 224 | 9·3 | 0·4 | 1·3 | S.W. | 10·30a.m. |
| 16 | 30·040 | 30·090 | 8 a.m. | 30·000 | 1 to 5 p.m. | 3 | 1 | 1 | ... | 10 | 2 | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 6 | 207 | 8·6 | 0·4 | 1·1 | S.E. | 3·17 p.m. |
| 17 | 30·019 | 30·095 | 9 & 10a.m. | 30·000 | {2 to 6 pm; 3 to 6 a.m. | ... | ... | ... | 1 | 2 | ... | 3 | ... | ... | 10 | 4 | 2 | 2 | ... | ... | ... | 117 | 4·9 | 0·1 | 0·6 | E.N.E. | 6·52 p.m. |
| 18 | ..... | ..... | ..... | ..... | ..... | ... | ... | ... | ... | ... | 6 | 1 | ... | 2 | 4 | 1 | 5 | 5 | ... | ... | ... | 187 | 7·8 | 0·3 | 1·3 | E.N.E. | 2·22 p.m. |
| 19 | 29·977 | 30·040 | 9 a.m. | 29·945 | 2, 3, 4, & 5 p.m. | ... | ... | ... | ... | 1 | 2 | ... | ... | 2 | ... | ... | 1 | 16 | 1 | 1 | ... | 137 | 5·7 | 0·2 | 0·5 | E.S.E. | 1·20 p.m. |
| 20 | 29·888 | 30·000 | 9 a.m. | 29·800 | 5 a.m. | ... | ... | ... | ... | 3 | 5 | 1 | 6 | ... | 1 | 4 | 4 | ... | ... | ... | ... | 210 | 8·7 | 0·4 | 2·0 | E.N.E. | 3· 9 p.m. |
| 21 | 29·867 | 29·900 | 7, 10, & 11 p.m. | 29·825 | 6 a.m. | 4 | 1 | ... | 4 | 8 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 7 | 260 | 10·8 | 0·6 | 2·9 | S. | 1·12 p.m. |
| 22 | 29·778 | 29·845 | 8 a.m. | 29·690 | 3 p.m. | 2 | ... | 1 | 4 | 8 | 5 | 1 | ... | ... | ... | ... | ... | ... | ... | 1 | 2 | 199 | 8·3 | 0·4 | 1·3 | W. | 8·11 a.m. |
| 23 | 29·762 | 29·845 | 9 a.m. | 29·700 | 4, 5, & 7 a.m. | 4 | 4 | ... | 3 | 9 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 155 | 6·5 | 0·2 | 0·7 | S. | 3·39 p.m. |
| 24 | 29·605 | 29·700 | 9 &10a.m. | 29·550 | 4 a.m. | ... | ... | ... | 1 | 6 | 8 | 1 | 3 | 2 | ... | 3 | ... | ... | ... | ... | ... | 111 | 4·6 | 0·1 | 0·4 | N. | 6· 0 p.m. |
| 25 | ..... | ..... | ..... | ..... | ..... | ... | ... | 5 | 9 | 4 | 3 | ... | ... | 1 | 2 | ... | ... | ... | ... | ... | ... | 210 | 8·8 | 0·4 | 2·4 | S.W. | 1·49 p.m. |
| 26 | 29·640 | 29·690 | 9 p.m. | 29·600 | 1 & 2 p.m. | 7 | 2 | 3 | 9 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 402 | 16·8 | 1·4 | 14·6 | S. | 8·38 a.m. |
| 27 | 29·810 | 29·930 | 8 a.m. | 29·655 | 9 a.m. | 8 | 6 | 6 | 3 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 654 | 27·2 | 3·7 | 22·4 | S. | 4·10 p.m. |
| 28 | 29·921 | 29·950 | 8 & 9 p.m. | 29·900 | 3 to 6 a.m. | ... | 8 | 9 | 7 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 426 | 17·8 | 1·6 | 5·8 | S.S.W. | 11·14 a.m. |
| 29 | 29·893 | 29·950 | 9 a.m. | 29·855 | 4 a.m. | ... | 5 | 10 | 3 | 6 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 332 | 13·8 | 1·0 | 4·2 | S. | 3·20 p.m. |
| 30 | 29·783 | 29·880 | 9 a.m. | 29·730 | 6 a.m. | ... | ... | ... | ... | 4 | 3 | 4 | 5 | ... | ... | 8 | ... | ... | ... | ... | ... | 147 | 6·1 | 0·2 | 0·6 | W. | 10·15 a.m. |
| Sums or Means. | 29·858 | April 12th 30·105 10 a.m. | | April 24th. 29·550 4 a.m. | | 93 | 59 | 51 | 69 | 156 | 53 | 16 | 19 | 18 | 25 | 44 | 28 | 35 | 8 | 8 | 33 | Sum 7388 | Mean. 10·3 | Mean. 0·6 | | | |

The self-registering Barometer is photographic, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour. Barometer results for 2nd, 18th, and 25th, are not given, owing to failure of photography.

# ABSTRACT FROM METEOROLOGICAL STATIONS,

## FOR THE MONTH OF APRIL, 1872.

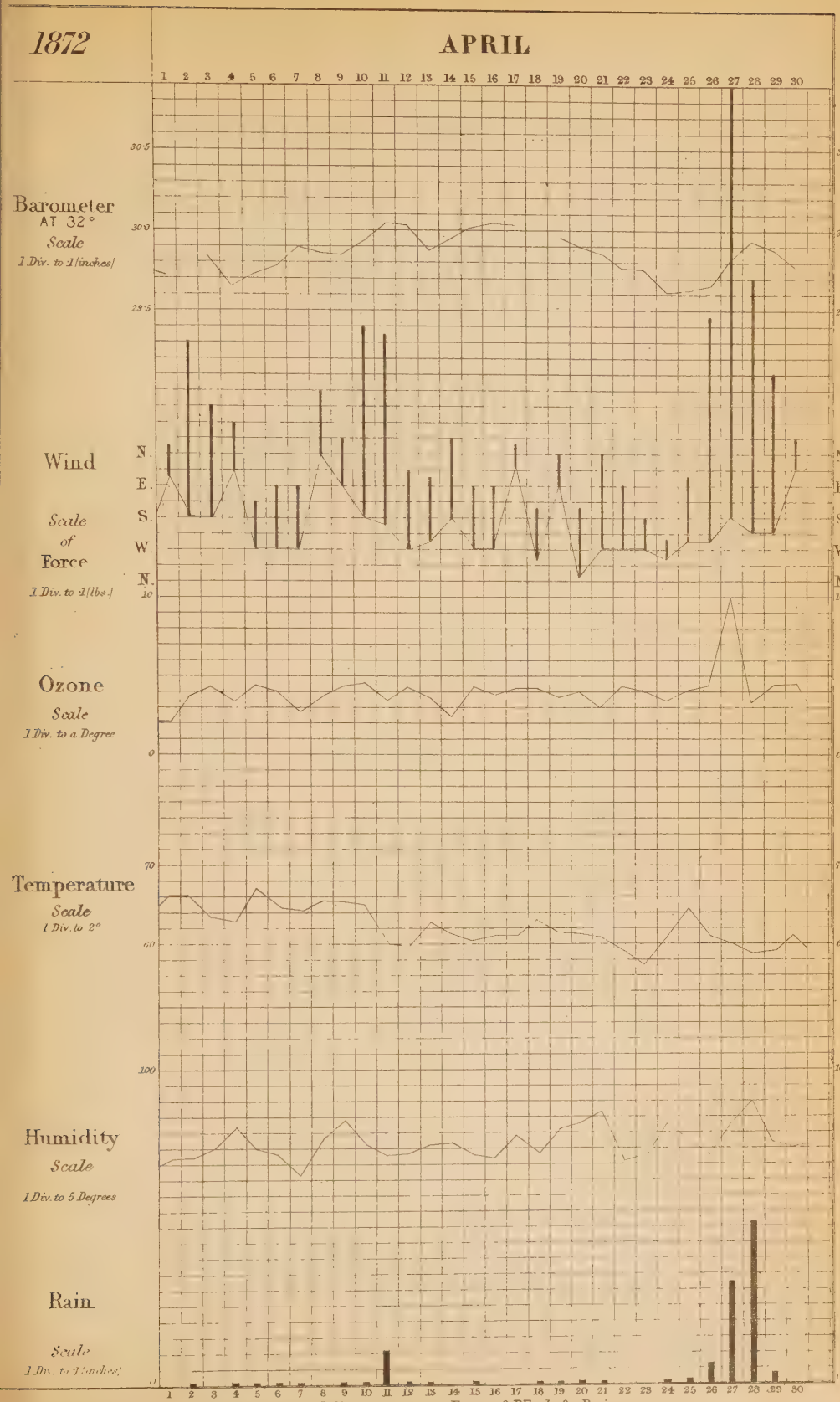
| Stations. | Least Distance from East Coast in miles. | Height above sea in feet. | Mean of Observations taken at 9 a.m., April, 1872. | | | | | | | | | | For 24h, previous to 9 a.m. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Wind. | | | Temperature in Shade. | | | | Rain. | | | | Evaporation in inches. |
| | | | Barometer. | Temperature in Shade. | Humidity 0 @ 100. | Direction. | Force. 0-6 | Clouds. 0-10. | Mean. Max. | Mean. Min. | Extreme Max. | Extreme Min. | Total Fall, inches. | No. of Days | Greatest Fall, inches. | Date | |
| Tenterfield | 80 | ... | ... | 55·8 | ... | N.N.E. | 1·4 | 4·5 | 70·2 | 41·4 | 76·7 | 34·0 | 0·850 | 2 | 0·430 | 25 | 2·757 |
| Grafton | 22 | ... | ... | 65·3 | ... | S. | 0·6 | ... | 77·6 | 52·9 | 87·2 | 41·7 | 0·330 | 3 | 0·170 | 11 | 2·004 |
| Bourke | 393 | ... | ... | ... | ... | S.W. | 0·1 | 0·8 | 78·0 | ... | 85·4 | ... | 0·036 | 1 | 0·036 | 24 | ... |
| Narrabri | 196 | ... | ... | 65·5 | ... | S.E. | 1·2 | ... | 80·3 | 50·6 | 91·9 | 46·5 | 0·280 | 1 | 0·280 | 24 | 2·696 |
| Armidale | 80 | 3278 | 30·165 | 54·3 | 85·0 | W. | 1·2 | 3·4 | 65·3 | 43·2 | 71·2 | 36·1 | 0·320 | 3 | 0·150 | 11 | 2·460 |
| Port Macquarie | 0 | ... | ... | 63·8 | ... | S.W. | 2·0 | 2·4 | 72·5 | 55·0 | 79·3 | 50·9 | 3·300 | 10 | 1·200 | 28 | 4·370 |
| Murrurundi | 94 | 1545 | ... | 58·7 | ... | W. | 0·4 | 3·4 | 70·6 | 46·8 | 79·3 | 36·3 | 0·760 | 2 | 0·610 | 28 | ... |
| Cassilis | 120 | ... | ... | 58·7 | ... | E. | 0·3 | ... | 74·0 | 43·3 | 81·1 | 30·2 | 0·350 | 3 | 0·210 | 25 | 1·239 |
| Muswellbrook | 68 | 475 | ... | ... | ... | W. | 1·7 | ... | ... | ... | ... | ... | 1·410 | 1 | 1·410 | 28 | 3·003 |
| Dubbo | 182 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Mudgee | 121 | ... | ... | 58·8 | ... | E. | 0·2 | ... | 72·6 | 45·0 | 80·4 | 32·0 | 0 | ... | 0 | ... | ... |
| Dalwood | 27 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | .. | 1·500 | 4 | 1·140 | 27 | ... |
| West Maitland | 18 | ... | ... | 62·4 | ... | W. | 0·8 | 3·6 | 71·4 | 53·3 | 79·2 | 44·7 | 1·170 | 5 | 0·760 | 29 | 3·932 |
| Lambton | 7 | ... | ... | 59·7 | ... | W. | 1·7 | ... | 71·8 | 47·6 | 84 3 | 39·0 | 2·610 | 4 | 0·930 | 12 | 2·679 |
| Newcastle | 1 | 112 | 30·055 | 63·2 | 80·0 | S.W. | 0·2 | 3·5 | 71·0 | 55·4 | 82·3 | 50·1 | 3·690 | 9 | 1·690 | 12 | ... |
| Orange | 124 | 2891 | ... | 51·5 | ... | S. | 1·1 | ... | 62·8 | 40·2 | 69·6 | 27·7 | 0·580 | 5 | 0·170 | 25 & 26 | 2·789 |
| Bathurst | 96 | 2200 | 30·058 | 55·3 | 75·0 | W. | 0·9 | 3·1 | 73·8 | 36·8 | 81·0 | 30·0 | 0·100 | 1 | 0·100 | 25 | ... |
| Kurrajong | 35 | 1870 | ... | 54·6 | ... | E. | ... | ... | 62·6 | 46·6 | 70·0 | 40·0 | 0·900 | 3 | 0·450 | 26 | ... |
| Mount Victoria | 61 | 3496 | 30·082 | 53·4 | 75·0 | S.W. | 0·1 | 3·1 | 63·1 | 43·7 | 70·1 | 36·4 | 0·230 | 5 | 0·100 | ... | 2 508 |
| Woodford | 50 | 2192 | 30·028 | 58 0 | ... | W. | 0·9 | ... | 63·3 | 52·6 | 72·4 | 43·4 | 0·350 | 4 | 0·120 | 27 | ... |
| Parramatta | 16 | ... | ... | 60·5 | ... | S.W. | 1·1 | ... | 69·5 | 51·4 | 76·8 | 43·0 | 1·290 | 3 | 0·850 | 28 | ... |
| Sydney | 5 | 155 | 30·089 | 62·1 | 76·7 | W. | 0·6 | 4·9 | 68·9 | 55·3 | 75·2 | 47·6 | 2·081 | 10 | 1·014 | 28 | 3·145 |
| Liverpool | 16 | ... | 30·078 | 59·2 | ... | ..... | ... | ... | 69·6 | 48·8 | 77·0 | 38·0 | 1·656 | 8 | 0·950 | 27 | ... |
| Wentworth | 476 | ... | ... | 61·4 | ... | S. | 1·4 | ... | 73·8 | 49·0 | 84·5 | 41·0 | 0·540 | 2 | 0·440 | 24 | 4·303 |
| Wilton | 13 | ... | ... | ... | ... | ..... | .. | ... | ... | ... | ... | ... | 0·700 | 2 | 0·560 | 28 | ... |
| Cordeaux River | 10 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 1·360 | 5 | 0·650 | 27 | ... |
| Young | 140 | ... | ... | 53·9 | ... | N.E. | 0·8 | ... | 68·9 | 38·9 | 76·0 | 26·1 | 0 | 0 | 0 | 0 | 5·834 |
| Wollongong | 0 | ... | ... | 61·3 | ... | S.W. | 1·6 | ... | 67·5 | 55·0 | 73·4 | 51·7 | 1·460 | 3 | 1·000 | 27 | 3·531 |
| Moss Vale | 31 | ... | ... | 53·2 | ... | S. | 0·8 | ... | 61·8 | 44·6 | 68·4 | 36·8 | 1·290 | 4 | 0·900 | 27 | ... |
| Goulburn | 54 | 2129 | 30·063 | 54·7 | 70·0 | W. | 0·0 | 3·1 | 71·2 | 38·1 | 79·3 | 26·8 | 0·340 | 4 | 0·160 | 27 | 2·454 |
| Terrara | 0 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 1·310 | 7 | 0·400 | 5 | ... |
| Wagga Wagga | 161 | ... | ... | 54·9 | ... | W | 1·2 | ... | 66·1 | 43·6 | 70·1 | 34·9 | 0·220 | 2 | 0·160 | 24 | 2·900 |
| Cape St. George | 0 | 175 | 30·032 | 61·3 | 70·0 | S. | 1·5 | 4·8 | 65·6 | 56·9 | 71·8 | 50·6 | 3·873 | 13 | 0·813 | 6 | ... |
| Queanbeyan | 60 | ... | ... | 43·0 | ... | E.S.E. | 0·0 | ... | 53·7 | 32·2 | 61·2 | 20·1 | 0·370 | 2 | 0·200 | 24 | 3·284 |
| Urana | 218 | ... | ... | 57·1 | ... | W. | ... | ... | 71·8 | 42·3 | 79·1 | 40·1 | 0 | ... | 0 | ... | 3·107 |
| Deniliquin | 287 | 410 | 30·203 | 60·4 | 74·0 | S. | 1·0 | 2·3 | 76·4 | 44·4 | 88·1 | 33·2 | 0·780 | 3 | 0·570 | 24 | ... |
| Kiandra | 88 | 4640 | 30·058 | 42·2 | 78·0 | S.E. | 0·4 | 4·0 | 56·2 | 28·2 | 65·9 | 11·6 | 1·810 | 7 | 0·530 | 25 | ... |
| Cooma | 52 | 2637 | ... | ... | ... | S. | 2·0 | ... | ... | 35·8 | ... | 22·8 | 0·310 | 4 | 0·150 | 24 | 1·415 |
| Albury | 175 | 572 | ... | 58·5 | ... | N. | 0·2 | ... | 76·9 | 40·0 | 86·4 | 31·3 | 1·160 | 3 | 0·900 | 24 | ... |
| Eden | 0 | 107 | 30·044 | 61·6 | 80·0 | S. | 1·3 | 4·8 | 68·6 | 54·5 | 74 0 | 47·1 | 1·030 | 5 | 0·560 | 27 | ... |

Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only twelve of the stations have barometers.

## REMARKS.

Tenterfield—Thunderstorms, 19th and 25th.
Grafton—Thunderstorm, 11th.
Bourke—Thunderstorm, 23rd.
Narrabri—Very foggy, 27th.
Armidale—Frosty, end of month.
Port Macquarie—Thunderstorms, 10th and 11th. Squally, 28th and 29th.
Muswellbrook—Thunderstorm, 24th.
Mudgee—Lunar Coronæ, 17th.
West Maitland—Foggy, 10th, 13th, and 18th. S.E. squally, 11th.
Lambton—Thunderstorms, 10th and 27th. Lightning frequent.
Newcastle—Heavy sea, 15th, 16th, 23rd, and 29th.
Orange—Meteors observed, 3rd and 9th. Frost during month.
Bathurst—Rain gauge upset on 24th.
Kurrajong—Thunder and lightning, 18th and 24th; boisterous, 27th and 28th.
Mount Victoria—Thunderstorm, 18th. Foggy, 15th and 16th
Sydney—Stormy and cold, 27th.
Liverpool—Storm, 25th. Fogs during month, and frost, 22nd.
Wentworth—Heavy thunderstorm, 24th.
Cordeaux River—Frost, 22nd and 23rd. Heavy lightning, 5th, thunder, 28th.
Wollongong—Strong S. gale on 26th.
Moss Vale—Foggy, 10th.
Goulburn—Thunderstorms, 18th and 24th. Frost 13th, and foggy during month.
Terrara—Thunderstorm, 3rd.
Cape St. George—Thunderstorms, 5th, 25th, and 26th. Hail, 5th, S. gales, 11th, 12th, 15th, 27th, 28th, and 29th.
Queanbeyan—Thunderstorms, 18th and 24th. Frosty, 29th.
Deniliquin—Heavy thunderstorm, 23rd.
Kiandra Hail 10th, thunderstorm, 24th. Foggy, 3rd, 15th, 17th, and 18th.
Cooma—Fogs and frosts during month.
Albury—Fogs, 24th and 30th.
Eden—S.W. gale, 20th.

# METEOROLOGICAL CURVES




*The dark vertical lines represent Force of Wind & Rain.*

Lithographed at the Surveyor Generals Office Sydney. June 1872

*Heavy Dew on 2nd, 4th, 5th, 6th, 7th, 9th, 10th, 13th, 19th, 20th, and 21st* ——— *Force of Wind on 27th 3·7 lbs.*

# METEOROLOGICAL OBSERVATIONS

MADE AT THE

# GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

# ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

# MONTH OF MAY, 1872;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER

1872.

[Price, 6d.] 3u 27—72

# METEOROLOGICAL OBSERVATIONS.

## GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s

Magnetic Variation 9° 32′ 41″ East.

## MAY, 1872.

### GENERAL ABSTRACT.

| | | | |
|---|---|---|---|
| **BAROMETER** .. At 32° Fah. | Highest Reading ... ... | 30·260 | ... On the 7th, at 9 a.m. |
| | Lowest Reading ... ... | 29·320 | ... On the 18th, at 4 a.m. |
| | Mean Height ... ... | 29·897 | |

(Being 0·048 in. less than that in the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **WIND** .. .. | Greatest Pressure... ... | 14·6 lbs. | ... On the 3rd and 13th. |
| | Mean Pressure ... ... | 0·6 lbs. | |
| | Number of Days Calm ... | 0 | |
| | Prevailing Direction ... | W. | |

(Prevailing direction during the same month for the preceding 13 years W.)

| | | | |
|---|---|---|---|
| **TEMPERATURE** | Highest in the Shade ... | 68·8 | ... On the 11th. |
| | Lowest in the Shade ... | 40·4 | ... On the 23rd. |
| | Greatest Range ... ... | 21·4 | ... On the 22nd. |
| | Highest in the Sun ... | 106·0 | ... On the 1st. |
| | Highest in a Black Box with Glass Top ... ... | 170·7 | ... On the 1st. |
| | Lowest on the Grass ... | 34·7 | ... On the 23rd. |
| | Mean Diurnal Range ... | 13·7 | |
| | Mean in the Shade ... | 56·5 | |

(Being 2·0 less than that of the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **HUMIDITY** .. | Greatest Amount... ... | 100·0 | ... On the 26th, 28th, and 31st. |
| | Least ... ... ... | 40·0 | ... On the 1st. |
| | Mean ... ... ... | 78·1 | |

(Being 3·1 greater than that of the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **RAIN** .. .. | Greatest Fall ... ... | 0·744 inch. | On the 25th. |
| | Number of Days ... ... | 13 rain and 7 dew. | |
| | Total Fall ... ... | 1·252 inch. | 65 ft. above the ground. |
| | | 1·909 inch. | 15 inches above the ground. |

(Being 2·306 inches less than that of the same month on an average of the preceding 13 years.)

| | | |
|---|---|---|
| **EVAPORATION** | Total Amount ... ... | 1·959 inch. |
| **OZONE** .. .. | Mean Amount ... ... | 4·3 |

(Being 0·1 less than that in the same month on an average of the preceding 12 years.)

| | | |
|---|---|---|
| **ELECTRICITY** .. | Number of Days Lightning | 4 |
| **CLOUDY SKY** .. | Mean Amount ... ... | 5·5 |
| | Number of Clear Days ... | 4 |
| **METEORS** .. | Number Observed ... | 0 |

### REMARKS.

The weather during the month has been fine, dry, and cold. The mean temperature being 2° below the average for the same month, and the rainfall 2·306 in. below the average. It is remarkable that the total amount for the year up to the end of May, is 11·529 in. below the average of the same period.

The rainfall has been small at all stations, except Orange, Young, Urana, Kiandra, and Albury. At 23 stations it was less than 1 inch. At Kiandra 11·667 inches of snow fell during the month. A hot wind was experienced on the 17th at Muswellbrook.

## SYDNEY, MAY, 1872.

| Date. | Moon's Phases. | Standard Barometer at 9 a.m., corrected to Mean Sea Level. | Wind. | | Temperature. | | | | | | | | Humidity. 0–100. | Rain. Inches. | Cl'dy Sky. 0–10. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Dry. | Wet. | Shade. | | | | Sun. | Grass. | | | |
| | | | Prevailing Direction. | Total Velocity. Miles. | Mean 9.3.9. | Mean 9.3.9. | Max. | Min. | Range | Mean. | Max. | Min. | Sea Water. 9 a.m. | Mean 9.3.9. | Taken at 9, 3, & 9. |
| 1 | | 29·951 | N.E. | 141 | 63·2 | 57·5 | 67·7 | 50·1 | 17·6 | 58·9 | 106·0 | 46·0 | 67·6 | 75·3 | 0·001 | 3·0 |
| 2 | | ·834 | W.N.W. | 194 | 57·7 | 55·7 | 64·8 | 53·7 | 11·1 | 59·3 | 98·0 | 49·8 | 67·3 | 86·3 | 0·001 | 10·0 |
| 3 | | ·758 | S.W. | 482 | 56·8 | 53·8 | 61·1 | 55·9 | 5·2 | 58·5 | 95·4 | 50·1 | 67·6 | 80·0 | 0·175 | 9·7 |
| 4 | | 30·255 | W. | 279 | 56·4 | 51·4 | 63·3 | 49·6 | 13·7 | 56·5 | 100·0 | 44·1 | 67·2 | 70·0 | 0·368 | 3·3 |
| 5 | In Equat. | ·328 | E.S.E. | 152 | 52·1 | 49·6 | 63·2 | 47·4 | 15·8 | 55·3 | 101·4 | 42·8 | 67·4 | 83·0 | ·0 | 1·0 |
| 6 | | ·353 | S.S.W. | 375 | 57·8 | 52·6 | 62·5 | 49·0 | 13·5 | 55·8 | 97·7 | 44·0 | 67·0 | 69·3 | 0·001 | 2·7 |
| 7 | New Moon | ·491 | W.S.W. | 347 | 55·9 | 53·3 | 60·8 | 52·0 | 8·8 | 56·4 | 96·9 | 46·4 | 66·5 | 82·7 | 0·139 | 9·3 |
| 8 | | ·392 | S.S.W. | 209 | 57·7 | 53·8 | 61·2 | 50·6 | 10·6 | 55·9 | 87·8 | 45·1 | 66·4 | 76·0 | 0·017 | 10·0 |
| 9 | | ·270 | N.E. | 181 | 59·2 | 55·9 | 66·1 | 52·7 | 13·4 | 59·4 | 103·7 | 47·6 | 66·1 | 80·3 | ·0 | 3·7 |
| 10 | | ·108 | N. | 176 | 57·2 | 56·0 | 66·2 | 51·7 | 14·5 | 59·0 | 78·0 | 47·9 | 66·0 | 91·7 | 0·003 | 10·0 |
| 11 | | 29·930 | W.N.W. | 177 | 61·8 | 59·3 | 68·8 | 51·6 | 17·2 | 60·2 | 103·0 | 52·1 | 66·2 | 84·3 | 0·155 | 8·3 |
| 12 | G. N. Dec. | ·828 | W.N.W. | 316 | 59·1 | 51·3 | 67·4 | 54·8 | 12·6 | 61·1 | 105·1 | 45·9 | 65·7 | 58·0 | 0·008 | 1·0 |
| 13 | Apogee. | ·787 | W. | 408 | 58·2 | 52·1 | 63·6 | 54·1 | 9·5 | 58·9 | 100·2 | 47·4 | 65·9 | 65·7 | ·0 | 2·7 |
| 14 | | 30·032 | W. | 140 | 56·6 | 51·7 | 65·5 | 50·5 | 15·0 | 58·0 | 101·5 | 43·2 | 65·4 | 72·3 | ·0 | 3·7 |
| 15 | | ·015 | N. | 171 | 55·4 | 50·8 | 60·8 | 45·3 | 15·5 | 53·1 | 73·0 | 39·3 | 65·0 | 73·0 | 0·002 | 10·0 |
| 16 | First Qr. | ·028 | N.W. | 140 | 59·2 | 54·2 | 64·0 | 49·2 | 14·8 | 56·6 | 84·0 | 44·7 | 64·5 | 71·3 | ·0 | 10·0 |
| 17 | | 29·957 | W. | 143 | 57·2 | 55·9 | 60·8 | 53·6 | 7·2 | 57·2 | 85·8 | 50·2 | 64·7 | 90·7 | 0·078 | 10·0 |
| 18 | | ·702 | N.N.W. | 353 | 58·8 | 53·8 | 67·1 | 52·8 | 14·3 | 60·0 | 103·1 | 48·2 | 64·4 | 72·7 | 0·079 | 5·7 |
| 19 | In Equat. | ·539 | W. | 529 | 59·4 | 53·5 | 66·4 | 55·6 | 10·8 | 61·0 | 102·0 | 51·1 | 64·1 | 66·0 | ·0 | 4·0 |
| 20 | | ·968 | W. | 368 | 55·6 | 48·2 | 63·7 | 48·8 | 14·9 | 56 3 | 104·3 | 42·3 | 63·7 | 58·3 | ·0 | 3·0 |
| 21 | | 30·302 | W. | 223 | 51·2 | 45·7 | 58·6 | 45·8 | 12·8 | 52·2 | 95·0 | 37·4 | 63·3 | 66·7 | ·0 | 0·0 |
| 22 | | ·485 | W.N.W. | 165 | 52·9 | 47·4 | 62·1 | 40·7 | 21·4 | 51·4 | 96·7 | 34·8 | 63·5 | 67·7 | ·0 | 0·0 |
| 23 | Full Moon | ·430 | W.N.W. | 214 | 50·7 | 47·6 | 59·7 | 40·4 | 19·3 | 50·1 | 97·3 | 34·7 | 62·7 | 79·3 | 0·001 | 0·0 |
| 24 | | ·340 | W. | 192 | 55·7 | 51·6 | 64·9 | 45·6 | 19·3 | 55·3 | 100·5 | 39·8 | 62·5 | 76·7 | ·0 | 4·3 |
| 25 | Perigee. | ·456 | W.N.W. | 129 | 54·9 | 53·0 | 59·8 | 49·9 | 9·9 | 54·9 | 97·6 | 47·2 | 62·4 | 88·0 | 0·744 | 6·7 |
| 26 | G. S. Dec. | ·351 | W. | 176 | 47·1 | 47·1 | 64·6 | 44·6 | 20·0 | 54·6 | 98·9 | 40·8 | 61·9 | 100 0 | 0·017 | 0·0 |
| 27 | | ·282 | W. | 233 | 54·4 | 51·2 | 64·8 | 43·8 | 21·0 | 54·3 | 99·6 | 39·0 | 62·1 | 79·7 | 0·003 | 4·3 |
| 28 | | ·420 | W. | 204 | 55·5 | 52·9 | 61·4 | 48·1 | 13·3 | 54·8 | 93·6 | 44·7 | 61·7 | 85·0 | 0·104 | 10·0 |
| 29 | | ·411 | N.N.E | 96 | 57·0 | 54·8 | 60·9 | 51·5 | 9·4 | 56·2 | 89·0 | 49·1 | 62·0 | 85·7 | ·0 | 10·0 |
| 30 | Last Qr. | ·295 | N.N.E | 151 | 57·1 | 55·4 | 63·1 | 49·4 | 13·7 | 56·2 | 98·9 | 45·1 | 61·7 | 89·7 | 0·007 | 4·7 |
| 31 | | ·137 | W.N.W. | 120 | 55·0 | 54·5 | 58·4 | 50·2 | 8·2 | 54·3 | 64·3 | 46·7 | 61·3 | 96·3 | 0·006 | 9·0 |
| | | | | Sum. | | | | | | | | | | | Sum. | |
| Means | ..... | 30·143 | W. | 7184 | 56·3 | 52·6 | 63·3 | 49·6 | 13·7 | 56·5 | 95·4 | 44·8 | 64·6 | 78·1 | 1·909 | 5·5 |

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.

The Barometer at 9 a.m. reads 0·033 above the true mean for the day.

## SYDNEY, MAY, 1872.

| Date. | Evaporation. Inches. | Ozone, 0-10. Day. | Night. | Mean. | Remarks. |
|---|---|---|---|---|---|
| 1 | 0·036 | 3·0 | 2·0 | 2·5 | Fine. Afternoon warm. Dew falling in the evening. |
| 2 | 0·011 | 4·5 | 6·0 | 5·3 | Cloudy. Light showers at 8·52 a.m. and 9·20 a.m. Steady rain from 1·40 p.m. until 6·30 p.m. Thunder 1·59 p.m., with lightning from W. to S.E. Lightning all evening. |
| 3 | 0·237 | 8·0 | 5·5 | 6·8 | Cloudy and showery. Heavy rain from 11 a.m. until 1·10 p.m. Partial rainbow S.E. at 4 p.m. |
| 4 | 0·090 | 3·5 | 5·0 | 4·3 | Morning cloudy and dull. Hazy to W. in the evening. |
| 5 | 0·046 | ... | ... | 3·0 | Fine. Morning and evening cold. Light dew fell in the night. |
| 6 | 0·186 | 4·0 | 5·0 | 4·5 | Fine until about 2·30 p.m. Dark clouds S. & S.E. 4·30 p.m. Rainbow S.E. at 5 p.m. Evening showery. |
| 7 | 0·077 | 4·5 | 5·0 | 4·8 | Cold. Morning cloudy, and again after 12 p.m. Showery between 1·25 p.m. and 3 p.m. Partial clearing of clouds in afternoon and evening. |
| 8 | 0·060 | 3·0 | 4·0 | 3·5 | Cloudy, dull, and cold. Raining very lightly at 12·55 p.m., and again at 5 p.m. |
| 9 | 0·047 | 4·0 | 5·5 | 4·8 | Afternoon cloudy, towards evening clouds cleared again. Heavy dew falling in the evening. |
| 10 | 0·010 | 4·5 | 2·0 | 3·3 | Cloudy. Forenoon foggy. Light rain nearly all the evening commencing at 4·17 p.m. |
| 11 | 0·066 | 3·5 | 5·0 | 4·3 | Fine from 10 45 a.m. until 11·30 a.m., and again in the evening after 8·30 p.m. Lightning S.E. at 9·22 p.m. Light shower in the night. |
| 12 | 0·078 | ... | ... | 2·5 | Forenoon cloudy from 10 a.m., until the afternoon, when the clouds cleared again. |
| 13 | 0·084 | 4·0 | 5·0 | 4·5 | Forenoon cloudy after 9·20 a.m. Towards evening it became cloudy again, and cleared about 8·30 p.m. Lightning N.E. & E. in evening. |
| 14 | 0·054 | 3·0 | 4·5 | 3·8 | After 9 a.m. very thin filmy clouds all over; about 5 p.m. clouds cleared. Evening hazy, and dew falling. |
| 15 | 0·052 | 3·5 | 4·5 | 4·0 | Cloudy, dull, and cold. Like storm S. and E., at 3 p.m. |
| 16 | 0·046 | 3·0 | 4·5 | 3·8 | Cloudy and dull. |
| 17 | 0·022 | ... | 5·0 | * | Cloudy and very dull. Forenoon cold. Shower about 12·30 a.m. Breaks in the clouds at 8·30 p.m. |
| 18 | 0·113 | 4·0 | 5·0 | 4·5 | Afternoon and evening cloudy. Partial clearing after 7·30 p.m. Showers after 4·30 a.m., and dropping 3·43 p.m. Lightning S.E. 7·45 p.m. |
| 19 | 0·137 | ... | ... | 2·5 | Cloudy from 10·15 a.m. until after 12·30 p.m. Strong dry breeze during the day. |
| 20 | 0·105 | 4·0 | 5·5 | 4·8 | Cloudy from noon until about 5 p.m. Cold. |
| 21 | 0·058 | 2·5 | 5·0 | 3·8 | Fine. Very cold and dry. Narrow belt of clouds on horizon in forenoon and afternoon. No clouds visible in the evening. |
| 22 | 0·052 | 4·0 | 4·5 | 4·3 | No clouds visible above the horizon during the day. Very cold. Horizon smoky-looking in the forenoon. Light dew fell in night. |
| 23 | 0·050 | 2·5 | 5·0 | 3·8 | No clouds visible above horizon during day. Horizon smoky-looking. Hazy to W. at 9 p.m., and light dew falling. |
| 24 | 0·062 | 3·0 | 8·0 | 5·5 | Evening cloudy at about 6·30 p.m.; also rainy after 8·10 p.m. |
| 25 | 0·035 | 6·0 | 5·0 | 5·5 | Heavy rain between 2·30 a.m., and 7 a.m., then light steady rain until after 9 a.m. Fine from 12·30 p.m. until 1·45 p.m., and again after 5 p.m. |
| 26 | 0·026 | ... | ... | 3·5 | Fine. Dense fog in the morning, and very cold. Heavy dew falling in the evening. |
| 27 | 0·047 | ... | 5·5 | * | Morning fine until 11 a.m., and again from 5 p.m. until 9·45 p.m. Between 11 a.m. and 5 p.m. the clouds were very light. Evening hazy to W. |
| 28 | 0·050 | 4·5 | 8·0 | 6·3 | Fine from 6·30 p.m. to 7·30 p.m. Raining at 5·45 a.m.; also dropping rain at 5·9 p.m. and 9·42 p.m. |
| 29 | 0·011 | 4·0 | 5·0 | 4·5 | Cloudy. Clouds cleared at 9·50 p.m. Light rain at 12·30 p.m. and at 1·55 p.m. Light shower in the night. |
| 30 | 0·011 | 4·0 | 6·0 | 5·0 | Forenoon cloudy until after 1·30 p.m., and again from 8·20 p.m. to 8·50 p.m. Light shower 7·15 p.m. from passing cloud, and another shower 5·20 p.m. |
| 31 | 0·000 | 4·0 | 5·0 | 4·5 | Cloudy. Dense fog in the morning. Light rain at 11·50 a.m., and afterwards dropping rain until after 3 p.m. Fine from 8 p.m. until 8·45 p m., and again at 9·15 p.m. |
| | Sum. | | | | |
| Mean | 1·959 | 3·9 | 5·0 | 4·3 | |

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.

Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

* The papers failed. Heavy dew on 1st, 2nd, 6th, 10th, 15th, 23rd, and 27th.

| Date. | Self-registering Barometer at 32°. | | | | | Self-registering Anemometer. | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mean. | Max. | Hour. | Min. | Hour. | S. | S.S.W. | S.W. | W.S.W. | W. | W.N.W. | N.W. | N.N.W. | N. | N.N.E. | N.E. | E.N.E. | E. | E.S.E. | S.E. | S.S.E. | Velocity. Total. Miles. | Velocity. Mean. pr. hr. | Mean Pressure. lbs. | Greatest Pressure. Direction of Wind. Time. |
| 1 | 29·640 | 29·750 | 9 a.m. | 29·590 | 5 a.m. | ... | ... | ... | ... | 8 | 2 | 2 | ... | 1 | 2 | 9 | ... | ... | ... | ... | ... | 141 | 5·9 | 0·2 | 0·5 N.E. 6·50 p.m. |
| 2 | 29·533 | 29·640 | 9 a.m. | 29·480 | 4 a.m. | ... | ... | ... | 3 | 3 | 12 | 1 | 2 | ... | 3 | ... | ... | ... | ... | ... | ... | 194 | 8·1 | 0·3 | 1·6 N. 6·20 p.m. |
| 3 | 29·813 | 30·035 | 8 a.m. | 29·585 | 9 a.m. | ... | 3 | 10 | 5 | 5 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 482 | 20·1 | 2·0 | 14·6 S.W. 10·45 a.m. |
| 4 | 30·044 | 30·090 | 8 a.m. | 29·995 | 2 p.m. | 9 | ... | ... | 1 | 10 | 4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 279 | 11·6 | 0·7 | 1·6 S. 4· 8 p.m. |
| 5 | 30·046 | 30·115 | 8 a.m. | 30·000 | 3, 4, & 5 p.m. | 3 | 1 | ... | ... | 2 | 2 | 1 | 4 | 4 | ... | ... | ... | ... | 7 | ... | ... | 152 | 6·3 | 0·2 | 0·6 S.S.W. 11·35 a.m. |
| 6 | 30·161 | 30·255 | 8 a.m. | 30·105 | 1 to 4 p.m. | 2 | 10 | 6 | 2 | 4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 375 | 15·6 | 1·2 | 3·1 S.S.W. 11·10 p.m. |
| 7 | 30·194 | 30·260 | 9 a.m. | 30·150 | 4 a.m. | ... | 8 | 4 | 11 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 347 | 14·5 | 1·1 | 8·0 S.S.W. 11· 8 a.m. |
| 8 | 30·062 | 30·160 | 9 a.m. | 30·025 | 5 & 6 a.m. | ... | 7 | 6 | 5 | 6 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 209 | 8·7 | 0·4 | 1·8 S.S.W. 11·30 a.m. |
| 9 | 29·936 | 30·045 | 9 a.m. | 29·875 | 4, 6, & 7 a.m. | ... | ... | ... | ... | 3 | 4 | ... | ... | 7 | 1 | 7 | 1 | ... | ... | 1 | ... | 181 | 7·5 | 0·3 | 1·3 N.E. 3·45 p.m. |
| 10 | 29·771 | 29·900 | 9 & 10 a.m. | 29·670 | 5 a.m. | 1 | ... | ... | 5 | 2 | 1 | ... | 4 | 8 | 3 | ... | ... | ... | ... | ... | ... | 176 | 7·3 | 0·3 | 0·8 N. 1· 5 a.m. |
| 11 | 29·634 | 29·720 | 9 a.m. | 29·595 | 5 p.m. | ... | ... | 5 | ... | 3 | 5 | 4 | ... | ... | ... | 1 | ... | ... | 5 | 1 | ... | 177 | 7·4 | 0·3 | 2·2 N.W. 12·15 a.m. |
| 12 | 29·585 | 29· 25 | 9 a.m. & 9 p.m. | 29·540 | 2 p.m. | ... | ... | ... | 1 | 10 | 13 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 316 | 13·2 | 0·9 | 4·2 W. 2·30 p.m. |
| 13 | 29·613 | 29·700 | 9 p.m. | 29·555 | 1 p.m. | ... | ... | ... | 2 | 22 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 408 | 17·0 | 1·4 | 14·6 W.S.W. 1·35 p.m. |
| 14 | 29·796 | 29·825 | 9 a.m. & 9 p.m. | 29·760 | 2 & 3 p.m. | ... | ... | 1 | 3 | 14 | ... | ... | ... | ... | ... | ... | ... | ... | 5 | 1 | ... | 140 | 5·8 | 0·2 | 1·6 W. 9·53 a.m. |
| 15 | 29·744 | 29·810 | 8 a.m. | 29·680 | 4 p.m. | ... | ... | ... | 3 | 2 | 3 | 5 | 4 | 6 | ... | 1 | ... | ... | ... | ... | ... | 171 | 7·2 | 0·3 | 1·6 N. 5·10 p.m. |
| 16 | 29·767 | 29·810 | 10 a.m. | 29·745 | 2, 3, & 4 p.m. | ... | ... | ... | 3 | 4 | 2 | 4 | 4 | 3 | ... | 3 | 1 | ... | ... | ... | ... | 140 | 5·8 | 0·2 | 0·7 N.E. 5· 5 p.m. |
| 17 | 29·585 | 29·750 | 9 & 10 a.m. | 29·480 | 4 a.m. | ... | ... | 1 | 1 | 10 | 8 | ... | ... | 1 | 3 | ... | ... | ... | ... | ... | ... | 143 | 5·9 | 0·2 | 2·4 S.W. 5· 5 a.m. |
| 18 | 29·398 | 29·500 | 9 a.m. | 29·320 | 4 a.m. | ... | ... | ... | ... | ... | 2 | 10 | 12 | ... | ... | ... | ... | ... | ... | ... | ... | 353 | 14·7 | 1·1 | 4·2 N.N.W. 8·30 a.m. |
| 19 | 29·528 | 29·750 | 8 a.m. | 29·340 | 11 & 12 a.m. | ... | ... | ... | 3 | 13 | 5 | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 529 | 22·1 | 2·4 | 12·5 W. 4·15 p.m. |
| 20 | 29·882 | 30·060 | 8 a.m. | 29·745 | 2 p.m. | ... | ... | 2 | 3 | 16 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 368 | 15·3 | 1·2 | 2·4 W. 8·42 p.m. |
| 21 | 30·146 | 30·260 | 8 a.m. | 30·050 | 1 p.m. | 5 | 2 | 1 | 1 | 13 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 223 | 9·3 | 0·4 | 3·1 W. 9·55 a.m. |
| 22 | 30·197 | 30·260 | 9 a.m. | 30·160 | 3 p.m. | ... | ... | ... | ... | 7 | 9 | 5 | ... | 3 | ... | ... | ... | ... | ... | ... | ... | 165 | 6·9 | 0·2 | 1·1 N. 8·10 p.m. |
| 23 | 30·089 | 30·200 | 9 a.m. | 30·040 | 3 & 4 p.m. | ... | ... | ... | ... | 6 | 11 | 2 | ... | ... | 1 | 1 | 3 | .. | ... | ... | ... | 214 | 8·9 | 0·4 | 2·2 W. 4· 0 a.m. |
| 24 | 30·164 | 30·230 | 8 a.m. | 30·100 | 1, 2, & 3 p.m. | 8 | 1 | 1 | 1 | 10 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | .. | 192 | 8·0 | 0·3 | 1·3 S. 3· 0 p.m. |
| 25 | 30·146 | 30·230 | 9 & 10 a.m. | 30·100 | 3, 4, & 5 a.m. | ... | ... | ... | 3 | 5 | 7 | 4 | 2 | ... | 2 | 1 | ... | ... | ... | ... | ... | 129 | 5·4 | 0·1 | 0·7 N.N.E. 7·45 p.m. |
| 26 | 30·062 | 30·110 | 9 & 10 a.m. | 30·015 | 5 a.m. | ... | ... | ... | ... | 10 | 6 | ... | 1 | 2 | 4 | ... | 1 | ... | ... | ... | ... | 176 | 7·3 | 0·3 | 1·6 N. 9· 0 p.m. |
| 27 | 30·100 | 30·165 | 8 a.m. | 30·030 | 1 & 2 p.m. | 3 | 5 | 1 | 1 | 9 | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 233 | 9·7 | 0·5 | 1·8 S. 2·20 p.m. |
| 28 | 30·168 | 30·260 | 10 a.m. & 9 p.m. | 30·145 | 3 & 4 a.m. | 4 | ... | ... | ... | 8 | 6 | ... | ... | ... | ... | ... | ... | 1 | 1 | 4 | 204 | 8·5 | 0·4 | 2·0 S.S.E. 12· 0 p.m. | |
| 29 | 30·117 | 30·205 | 10 a.m. | 30·050 | 5 a.m. | ... | ... | ... | ... | 1 | 1 | ... | 3 | 6 | 7 | 1 | ... | ... | ... | 5 | 96 | 4·0 | 0·1 | 0·5 N.N.E. 7· 5 p.m. | | |
| 30 | 29·963 | 30·075 | 9 a.m. | 29·895 | 4 & 5 a.m. | ... | ... | ... | ... | 3 | 4 | 4 | 1 | 2 | 6 | 3 | 1 | ... | ... | ... | ... | 151 | 6·3 | 0·2 | 1·3 N.E. 1·13 p.m. |
| 31 | 29·923 | 29·950 | 8, 9, 10, & 11 a.m. | 29·890 | 3 p.m. | ... | ... | ... | ... | 2 | 15 | 5 | ... | 2 | ... | ... | ... | ... | ... | ... | ... | 120 | 5·0 | 0·1 | 0·8 W.N.W. 8·49 a.m. |
| Sums or Means. | 29·987 | May, 7, 21, & 22. 30·260 | 9, 8, & 9 a.m. | May 18th. 29·320 | 4 a.m. | 35 | 37 | 38 | 57 | 212 | 136 | 49 | 38 | 45 | 32 | 27 | 7 | .. | 18 | 4 | 9 | Sum 7184 | Mean. 9·7 | Mean. 0·6 | |

The self-registering Barometer is photographic, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour.

# ABSTRACT FROM METEOROLOGICAL STATIONS,

## For the Month of MAY, 1872.

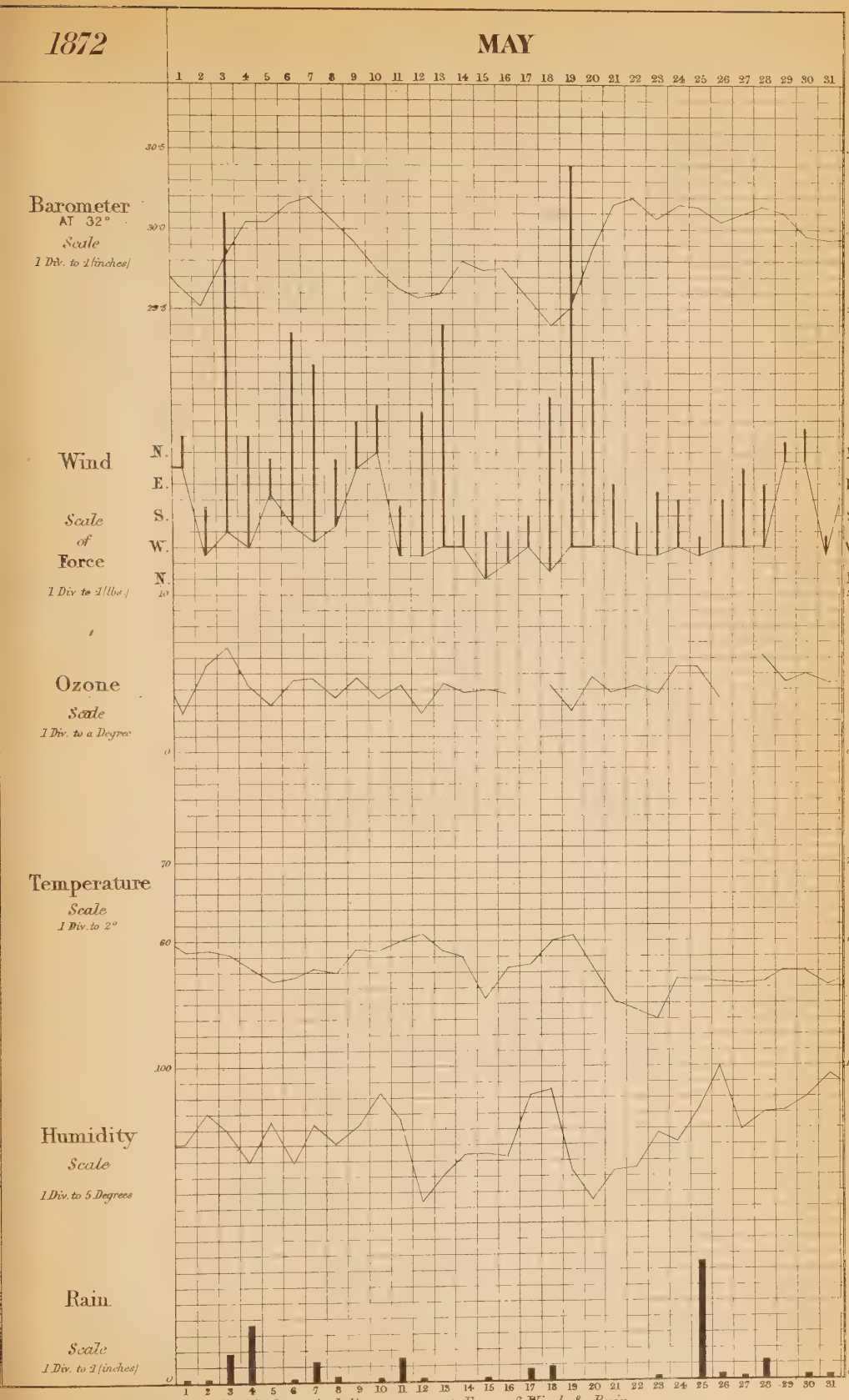
| Stations. | Least Distance from East Coast in miles. | Height above sea in feet. | Mean of Observations taken at 9 a.m., May, 1872. | | | | | | | For 24h, previous to 9 a.m. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Barometer. | Temperature in Shade. | Humidity 0 to 100. | Wind. | | Cloud 0-10. | Temperature in Shade. | | | | Rain. | | | | Evaporation in inches. |
| | | | | | | Direction | Force. 0-6 | | Mean. Max. | Mean. Min. | Extreme Max. | Extreme Min. | Total Fall, inches. | No. of Days | Greatest Fall, inches. | Date | |
| Tenterfield | 80 | ... | ... | 48·2 | ... | N.W. | 1·7 | 5·5 | 62·1 | 34·2 | 68·9 | 27·0 | 0·630 | 4 | 0·210 | 3 | 0·984 |
| Bourke | 393 | ... | ... | 56·9 | ... | E. | 0·0 | 2·3 | 68·0 | 45·7 | 78·9 | 29·9 | 0·464 | 4 | 0·450 | 31 | ... |
| Narrabri | 196 | ... | ... | 59·2 | ... | N.W. | 1·1 | ... | 73·2 | 45·2 | 84·9 | 29·5 | 0·620 | 4 | 0·360 | 31 | 5·280 |
| Armidale | 80 | 3278 | 30·256 | 47·9 | 84·0 | W. | 1·4 | 4·1 | 58·2 | 37·6 | 68·2 | 24·1 | 0·180 | 1 | 0·180 | 19 | 1·975 |
| Port Macquarie | 0 | ... | ... | 58·8 | ... | S.W. | 1·8 | 3·8 | 67·8 | 49·8 | 73·9 | 40·9 | 0·470 | 8 | 0·160 | 3 | 3·870 |
| Murrurundi | 94 | 1545 | ... | 51·5 | ... | W. | 1·0 | 4·9 | 61·4 | 41·6 | 71·7 | 21·3 | 0·150 | 1 | 0·150 | 11 | ... |
| Cassilis | 120 | ... | ... | 51·1 | ... | N.W. | 0·4 | ... | 64·2 | 37·9 | 76·1 | 25·2 | 0·810 | 6 | 0·270 | 18 | ... |
| Muswellbrook | 68 | 475 | ... | ... | ... | W. | 2·4 | ... | ... | 48·5 | ... | 36·0 | 0 | ... | ... | ... | 2·382 |
| Dubbo | 182 | ... | ... | 52·3 | ... | S.W. | 0·8 | ... | 60·7 | 43·9 | 69·9 | 32·9 | 1·090 | 8 | 0·500 | 11 | 1·884 |
| Mudgee | 121 | ... | ... | 50·2 | ... | W. | 1·1 | ... | 60·0 | 40·3 | 68·4 | 29·0 | 1·480 | 5 | 0·410 | 18 | ... |
| Dalwood | 27 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 0·590 | 8 | 0·180 | 31 | ... |
| West Maitland | 18 | ... | ... | 54·8 | ... | W. | 0·7 | 5·3 | 62·9 | 46·7 | 70·6 | 33·4 | 0·280 | 4 | 0·130 | 3 | 5·544 |
| Lambton | 7 | ... | ... | 54·6 | ... | W. | 1·8 | ... | 65·9 | 43·2 | 74·3 | 32·0 | 0·940 | 7 | 0·236 | 7 | 1·941 |
| Newcastle | 1 | 112 | 30·122 | 57·8 | 79·0 | N.W. | 0·3 | 3·8 | 65·5 | 50·1 | 74·8 | 38·8 | 0·740 | 8 | 0·190 | 8 | ... |
| Orange | 124 | 2891 | ... | 45·3 | ... | S. | 1·0 | ... | 53·6 | 36·9 | 60·9 | 27·5 | 3·880 | 11 | 0·990 | 19 | 1·291 |
| Bathurst | 96 | 2200 | 30·171 | 47·1 | 78·0 | W. | 0·5 | 5·1 | 62·5 | 31·6 | 73·0 | 22·0 | 1·160 | 6 | 0·450 | 18 | ... |
| Kurrajong | 35 | 1870 | ... | 49·5 | ... | W. | ... | ... | 56·3 | 42·7 | 63·0 | 35·0 | 0·770 | 7 | 0·250 | 24 | ... |
| Mount Victoria | 61 | 3490 | 30·131 | 46·6 | 85·0 | W. | 0·1 | 5·7 | 54·1 | 39·1 | 64·1 | 29·9 | 0·900 | 9 | 0·420 | 20 | 2·074 |
| Woodford | 50 | 2192 | 30·129 | 52·7 | ... | W. | 0·2 | ... | 58·1 | 47·3 | 64·4 | 39·4 | 0·570 | 6 | 0·230 | 29 | ... |
| Parramatta | 16 | ... | ... | 55·1 | ... | N.W. | 1·1 | 4·7 | 63·6 | 46·6 | 68·7 | 34·4 | 0·600 | 5 | 0·220 | 4 | ... |
| Sydney | 5 | 155 | 30·143 | 56·5 | 78·1 | W. | 0·6 | 5·5 | 63·3 | 49·6 | 68·8 | 40·4 | 1·909 | 13 | 0·744 | 25 | 1·959 |
| Liverpool | 16 | ... | 30·095 | 51·9 | ... | ..... | ... | ... | 61·8 | 41·9 | 67·0 | 30·0 | 0·732 | 9 | 0·210 | 4 | ... |
| Wentworth | 476 | ... | ... | 55·7 | ... | S.W. | 1·6 | ... | 65·1 | 46·3 | 76·3 | 36·0 | 0·980 | 9 | 0·280 | 13 | 2·577 |
| Wilton | 13 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 0·700 | 4 | 0·360 | 17 | ... |
| Cordeaux River | 10 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 1·310 | 8 | 0·410 | 4 | ... |
| Young | 140 | ... | ... | 47·9 | ... | N.W. | 1·3 | ... | 59·9 | 35·9 | 66·0 | 27·1 | 4·790 | 6 | 1·900 | 31 | 3·028 |
| Wollongong | 0 | ... | ... | 56·6 | ... | S.W. | 1·1 | ... | 62·6 | 50·5 | 70·9 | 41·2 | 0·790 | 2 | 0·720 | 3 | 4·242 |
| Moss Vale | 31 | ... | ... | 46·6 | ... | N.W. | 1·2 | ... | 53·2 | 40·0 | 61·4 | 27·8 | 1·090 | 6 | 0·400 | 3 | ... |
| Goulburn | 54 | 2129 | 30·162 | 47·3 | 81·0 | W. | 0·1 | 4·0 | 60·3 | 34·3 | 69·7 | 22 7 | 0·970 | 5 | 0·350 | 3 | 2·546 |
| Terrara | 0 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 0·470 | 3 | 0·350 | 3 | ... |
| Cape St. George | 0 | 175 | 30·033 | 59·6 | 72·0 | W. | 1·3 | 5·2 | 62·9 | 56·2 | 66·2 | 50·6 | 1·360 | 8 | 0·990 | 3 | ... |
| Queanbeyan | 60 | ... | ... | 40·6 | ... | N.N.W. | 0·1 | ... | 45·3 | 35·8 | 52·2 | 26·1 | 1·890 | 6 | 0·850 | 18 | 2·114 |
| Urana | 218 | ... | ... | 51·1 | ... | S.S.W. | ... | ... | 61·8 | 40·3 | 75·1 | 32·1 | 2·650 | 2 | 2·500 | 4 | ... |
| Kiandra | 88 | 4640 | 30·104 | 35·5 | 78·0 | N.W. | 0·4 | 6·9 | 47·1 | 23·8 | 60·3 | 11·6 | 10·530 | 15 | 2·210 | 18 | ... |
| Cooma | 52 | 2637 | ... | ... | ... | S. | 2·2 | 6·3 | ... | 30·1 | ... | 18·8 | 1·680 | 3 | 1·400 | 3 | 0·990 |
| Albury | 175 | 572 | ... | 49·5 | ... | S.W. | 0·1 | ... | 62·6 | 36·3 | 75·4 | 29·3 | 3·660 | 7 | 0·900 | 3 | ... |
| Eden | 0 | 107 | 30·169 | 55·4 | 81·0 | S.W. | 1 1 | 4·6 | 62·1 | 48·7 | 67·0 | 42·1 | 0·290 | 3 | 0·120 | 18 | ... |

Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only twelve of the stations have barometers.

## REMARKS.

Tenterfield—Frosty, 15th and 21st.
Armidale—Ice, 21st, 22nd, 23rd, and 24th. Boisterous, 12th, and frost during month.
Port Macquarie—Thunderstorm, 2nd; squally, 7th and 8th.
Muswellbrook—Thunderstorm, 2nd; hot wind, 17th.
Dubbo—Cold and showery during month.
West Maitland—Stormy, 13th and 20th; heavy fog, 10th; frost, 23rd.
Lambton—Lightning during month; heavy gale, 19th.
Newcastle—Foggy, 10th, 30th, and 31st; heavy sea, 7th and 8th.
Orange—Hard frost during month; thunderstorm, 3rd.
Bathurst—Misty, 8th, 10th, 22nd, 23rd, and 25th; sharp frosts, 22nd, 23rd, 25th, and 27th.
Kurrajong—Thunderstorm, 2nd; frosty and squally during month.
Mount Victoria—Heavy thunderstorm, 2nd, and stormy during month.
Parramatta—Ice on 22nd; cold, 15th; sharp frost, 23rd.
Sydney—Thunderstorm, 2nd; foggy, 10th; dense fogs, 26th and 31st; very cold, 22nd and 26th.
Liverpool—Frost, 15th, 22nd, 23rd, and 24th; thunder and lightning, 2nd.
Wentworth—Heavy squalls of wind, 18th.
Cordeaux River—Heavy frost, 5th, 22nd, 23rd, and 24th.
Moss Vale—Ice on 5th; windy, 19th; hard frost, 22nd; and foggy, 31st.
Goulburn—Sharp frost, 22nd and 23rd.
Cape St. George—Gales, 3rd, 4th, and 20th; rain squalls, 19th; lunar halo, 24th.
Queanbeyan—Sharp frost, 1st, 4th, and 22nd; thunderstorm 2nd.
Urana—Heavy storm, 3rd, and cold during month.
Kiandra—11·667 inches snow fell during month.
Cooma—Thunderstorms, 2nd and 17th; frosty all month; foggy, 8th, 15th, and 25th.
Albury—Thunderstorm, 17th; frosty and foggy during month.
Eden—High winds, 20th, 21st, and 22nd.

# METEOROLOGICAL CURVES




*The dark vertical lines represent Force of Wind & Rain.*

Lithographed at the Surveyor Generals Office Sydney. July 1872

*Heavy Dew on 1st 2nd 6th 10th 15th 23rd and 27th — Ozone tests failed on 17th and 27th*

# METEOROLOGICAL OBSERVATIONS

MADE AT THE

# GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

# ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

# MONTH OF JUNE, 1872;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER

1872.

[*Price*, 6*d*.] 3*u* 30—72

# METEOROLOGICAL OBSERVATIONS.

## GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s

Magnetic Variation 9° 32′ 41″ East.

## JUNE, 1872.

### GENERAL ABSTRACT.

| | | | | |
|---|---|---|---|---|
| **BAROMETER** .. At 32° Fah. | Highest Reading ... | ... 30·300 | ... | On the 10th, at 10 a.m. |
| | Lowest Reading ... | ... 29·290 | ... | On the 22nd, at 3 a.m. |
| | Mean Height ... | ... 29·756 | | |

(Being 0·182 in. less than that in the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **WIND** .. .. | Greatest Pressure... ... | 15·7 lbs.... | On the 4th. |
| | Mean Pressure ... ... | 0·7 lbs. | |
| | Number of Days Calm ... | 0 | |
| | Prevailing Direction ... | W. | |

(Prevailing direction during the same month for the preceding 13 years W.)

| | | | |
|---|---|---|---|
| **TEMPERATURE** | Highest in the Shade ... | 74·7 | ... On the 24th. |
| | Lowest in the Shade ... | 39·9 | ... On the 15th. |
| | Greatest Range ... ... | 22·8 | ... On the 24th. |
| | Highest in the Sun ... | 110·0 | ... On the 24th. |
| | Highest in a Black Box with Glass Top ... ... | 153·1 | ... On the 24th. |
| | Lowest on the Grass ... | 34·8 | ... On the 15th. |
| | Mean Diurnal Range ... | 13·0 | |
| | Mean in the Shade ... | 55·5 | |

(Being 0·9 greater than that of the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **HUMIDITY** .. | Greatest Amount... ... | 100·0 | ... On the 1st, and 8th. |
| | Least ... ... ... | 46·0 | ... On the 25th. |
| | Mean ... ... ... | 74·9 | |

(Being 1·2 less than that of the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **RAIN** .. .. | Greatest Fall ... ... | 0·893 inch. | On the 8th. |
| | Number of Days ... ... | 12 rain and 4 dew. | |
| | Total Fall ... ... | 0·932 inch. | 65 ft. above the ground. |
| | | 1·355 inch. | 15 inches above the ground. |

(Being 4·102 inches less than that of the same month on an average of the preceding 13 years.)

| | | |
|---|---|---|
| **EVAPORATION** | Total Amount ... ... | 1·672 inch. |
| **OZONE** .. .. | Mean Amount ... ... | 4·3 |

(Being 1·0 less than that in the same month on an average of the preceding 13 years.)

| | | |
|---|---|---|
| **ELECTRICITY** .. | Number of Days Lightning | 4 |
| **CLOUDY SKY** .. | Mean Amount ... ... | 5·6 |
| | Number of Clear Days ... | 5 |
| **METEORS** .. | Number Observed ... | 3 |

### REMARKS.

The Month has been dry, and some days very cold, though the mean temperature was rather above the average of the same month. The total rainfall up to June 30th is 1½ inches below the average. With the exception of Orange, Urana, Kiandra, and Albury, the rainfall was, for the season, small at all Stations. Frosts have been frequent, and at Cape St. George ice formed several times a few miles from the sea. At Kiandra 5 feet 10 inches of snow fell during the Month. At Dapto a fine Aurora was seen from 9 to 10 p.m. on the 24th.

## SYDNEY, JUNE, 1872.

| Date. | Moon's Phases. | Standard Barometer at 9 a.m., corrected to Mean Sea Level. | Wind. | | Temperature. | | | | | | | | | Humidity. 0-100. | Rain. Inches. | Cl'dy Sky. 0-10. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Dry. | Wet. | Shade. | | | | Sun. | Grass. | Sea Water. | | | |
| | | | Prevailing Direction. | Total Velocity. Miles. | Mean 9.3.9. | Mean 9.3.9. | Max. | Min. | Range | Mean. | Max. | Min. | 9 a.m. | Mean 9.3.9. | | Taken at 9, 3, & 9. |
| 1 | In Equat. | 30·192 | N.N.E | 138 | 55·9 | 54·8 | 62·4 | 48·4 | 14·0 | 55·4 | 98·4 | 45·6 | 61·1 | 92·7 | 0·006 | 3·3 |
| 2 | | ·197 | N. | 124 | 50·7 | 50·5 | 62·7 | 47·9 | 14·8 | 55·3 | 85·0 | 44·8 | 61·0 | 98·0 | 0·004 | 10·0 |
| 3 | | 29·959 | N. | 344 | 60·4 | 57·9 | 63·6 | 50·5 | 13·1 | 57·1 | 83·0 | 49·6 | 60·9 | 84·3 | 0·001 | 10·0 |
| 4 | | ·818 | W.N.W. | 547 | 56·4 | 48·3 | 61·6 | 51·1 | 10·5 | 56·4 | 94·4 | 49·1 | 60·7 | 56·0 | 0·075 | 1·3 |
| 5 | | ·914 | W. | 362 | 54·8 | 48·9 | 61·1 | 47·4 | 13·7 | 54·3 | 95·2 | 44·1 | 60·2 | 65·0 | ·0 | 2·7 |
| 6 | New Moon | 30·219 | W. | 195 | 51·7 | 47·9 | 58·8 | 45·0 | 13·8 | 51·9 | 94·6 | 39·1 | 60·1 | 75·3 | ·0 | 4·0 |
| 7 | | ·275 | W. | 218 | 52·9 | 48·3 | 58·9 | 47·6 | 11·3 | 53·3 | 89·0 | 41·9 | 59·9 | 71·3 | ·0 | 4·7 |
| 8 | G. N. Dec. | ·345 | W. | 214 | 54·3 | 53·4 | 59·2 | 48·9 | 10·3 | 54·1 | 95·0 | 44·3 | 60·0 | 93·7 | 0·893 | 4·3 |
| 9 | | ·328 | S. | 253 | 49·9 | 48·8 | 60·4 | 48·3 | 12·1 | 54·4 | 95·7 | 44·1 | 59·9 | 91·0 | 0·004 | 10·0 |
| 10 | Apogee. | ·400 | W. | 268 | 50·4 | 48·8 | 54·3 | 48·1 | 6·2 | 51·2 | 66·5 | 42·7 | 59·7 | 88·3 | 0·031 | 10·0 |
| 11 | | ·183 | W. | 197 | 52·2 | 50·4 | 58·0 | 47·5 | 10·5 | 52·8 | 81·6 | 43·2 | 59·9 | 87·3 | 0·258 | 6·7 |
| 12 | | 29·986 | W.N.W. | 165 | 49·0 | 45·7 | 57·3 | 41·2 | 16·1 | 49·3 | 94·4 | 37·1 | 59·7 | 79·3 | 0·005 | 0·3 |
| 13 | | ·925 | W. | 280 | 49·4 | 44·5 | 57·4 | 41·2 | 16·2 | 49·3 | 93·8 | 35·2 | 59·9 | 69·0 | 0·002 | 8·3 |
| 14 | First Qr. | 30·110 | W. & W.N.W. | 193 | 49·2 | 45·5 | 57·4 | 43·1 | 14·3 | 50·3 | 94·6 | 37·1 | 59·2 | 75·7 | ·0 | 0·0 |
| 15 | | ·134 | W. | 225 | 51·3 | 47·9 | 61·0 | 39·9 | 21·1 | 50·5 | 98·6 | 34·8 | 59·1 | 77·7 | 0·001 | 9·7 |
| 16 | In Equat. | ·024 | W. | 269 | 50·0 | 45·7 | 57·1 | 43·4 | 13·7 | 50·3 | 88·2 | 39·6 | 59·2 | 71·0 | ·0 | 10·0 |
| 17 | | ·087 | W.N.W. | 152 | 52·6 | 49·0 | 59·5 | 45·6 | 13·9 | 52·6 | 94·8 | 38·3 | 59·1 | 77·0 | ·0 | 6·7 |
| 18 | | 29·991 | N.N.E | 395 | 55·0 | 53·0 | 58·5 | 49·2 | 9·3 | 53·9 | 66·0 | 45·4 | 58·9 | 86·3 | 0·007 | 10·0 |
| 19 | | ·880 | N.N.W. | 219 | 58·5 | 54·8 | 66·5 | 51·8 | 14·7 | 59·2 | 93·5 | 46·5 | 58·7 | 77·7 | 0·020 | 9·0 |
| 20 | | ·783 | N.N.W. | 317 | 59·9 | 54·6 | 64·5 | 53·2 | 11·3 | 58·9 | 88·0 | 48·5 | 58·9 | 69·7 | ·0 | 10·0 |
| 21 | Full Moon | ·754 | W.N.W. | 275 | 61·7 | 54·4 | 68·6 | 55·1 | 13·5 | 61·9 | 101·2 | 49·0 | 58·7 | 61·7 | ·0 | 4·0 |
| 22 | G. S. D c. Perigee. | ·664 | N.W. | 221 | 64·2 | 58·2 | 71·1 | 58·6 | 12·5 | 64·9 | 105·3 | 51·4 | 58·9 | 68·0 | ·0 | 6·3 |
| 23 | | ·586 | W.N.W. | 329 | 64·0 | 57·1 | 70·5 | 61·6 | 8·9 | 66·1 | 103·3 | 51·2 | 58·7 | 63·0 | ·0 | 0·0 |
| 24 | | ·766 | W. | 321 | 63·2 | 57·7 | 74·7 | 51·9 | 22·8 | 63·3 | 110·0 | 45·2 | 58·9 | 70·0 | ·0 | 4·7 |
| 25 | | ·807 | W. | 502 | 58·1 | 50·0 | 62·9 | 54·4 | 8·5 | 58·7 | 97·0 | 44·1 | 58·7 | 56·7 | 0·023 | 0·0 |
| 26 | | ·945 | W. | 339 | 57·9 | 50·7 | 64·3 | 51·6 | 12·7 | 58·0 | 98·6 | 41·3 | 58·9 | 60·3 | ·0 | 0·0 |
| 27 | | 30·063 | W. | 159 | 53·4 | 49·4 | 56·1 | 46·2 | 9·9 | 51·2 | 86·0 | 38·7 | 58·7 | 74·0 | ·0 | 10·0 |
| 28 | In Equat. Last Qr. | 29·857 | W.S.W. | 279 | 58·1 | 50·9 | 65·0 | 48·3 | 16·7 | 56·7 | 99·2 | 39·1 | 58·3 | 60·3 | 0·024 | 2·3 |
| 29 | | 30·034 | N. | 182 | 53·5 | 50·7 | 59·9 | 49·3 | 10·6 | 54·6 | 93·0 | 42·8 | 58·1 | 81·3 | ·0 | 10·0 |
| 30 | | 29·648 | W.N.W. | 331 | 59·0 | 53·0 | 66·2 | 52·3 | 13·9 | 59·3 | 99·5 | 48·3 | 58·3 | 66·0 | 0·001 | 0·0 |
| | | | | Sum. | | | | | | | | | | | Sum. | |
| Means | ..... | 29·996 | W. | 8013 | 55·3 | 51·0 | 62·0 | 49·0 | 13·0 | 55·5 | 92·8 | 43·4 | 59·4 | 74·9 | 1·355 | 5·6 |

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.
Direction, Velocity, and Pressure of the Wind, deducted from 24 hourly records of Robinson's Anemometer.
The Barometer at 9 a.m. reads 0·032 above the true mean for the day.

## SYDNEY, JUNE, 1872.

| Date. | Evaporation. Inches. | Ozone, 0-10. Day. | Night. | Mean. | Remarks. |
|---|---|---|---|---|---|
| 1 | 0·024 | 5·0 | 4·0 | 4·5 | Dense fog all morning, afterwards fine. Clear evening, and heavy dew falling. |
| 2 | 0·014 | ... | ... | 2·8 | Morning cloudy, foggy, and cold. Afternoon and evening dull, like rain. |
| 3 | 0·066 | 7·0 | 8·0 | 7·5 | Cloudy. Morning foggy-looking. Light rain, 3 p.m., and during afternoon. Evening cloudy, and dull. Shower, 10·9 p.m. |
| 4 | 0·108 | 3·0 | 5·0 | 4·0 | Fine and very cold. Strong dry wind all forenoon and evening. |
| 5 | 0·076 | 4·5 | 5·0 | 4·8 | Forenoon cloudy and fine alternately. Afternoon and evening fine. Cold dry wind blowing all day. |
| 6 | 0·053 | 1·5 | 5·0 | 3·3 | Cloudy after 8 p m., and dull. Light dry wind in afternoon and evening. |
| 7 | ... | 1·0 | 7·5 | 4·3 | Cloudy from 10·15 a.m. until 3·30 p.m., and again after 7·30 p.m. Shower at 8 p.m. Cold during day. Meteor observed N. at 8·50 p.m. |
| 8 | 0·010 | 5·0 | 6·0 | 5·5 | Heavy clouds all forenoon. Morning showery. Partial rainbow at 11 a.m. Heavy dew falling in the evening. |
| 9 | 0·055 | ... | ... | 4·3 | Cloudy until 10 a.m., and again at noon for a while. Shower at 10·10 p.m. |
| 10 | 0·060 | 6·0 | 9·0 | 7·5 | Cloudy, very dull, and raining lightly all day ; also very cold. Rainbow, S.W., at 9·40 a.m. |
| 11 | 0·025 | 3·0 | 5·0 | 4·0 | Fine after 7 p.m., with a hazy appearance, W., and dew falling. Very light rain at 9 a.m. |
| 12 | 0·032 | ... | 5·5 | ... | Fine, and very cold. Dense fog at daylight. Heavy dew falling in the evening. |
| 13 | 0·054 | 3·5 | 5·0 | 4·3 | Cloudy, and very cold. Very light clouds throughout the day. |
| 14 | 0·038 | 1·5 | 5·0 | 3·3 | Fine, and very cold. Atmosphere very dry until evening, when dew began to fall. No clouds all evening. |
| 15 | 0·052 | 4·0 | 5·0 | 4·5 | Fine, from 9·25 a.m. until after 1 p.m. Lightning, E., during the evening. Meteor observed, S.E., at 9·35 p.m. |
| 16 | 0·056 | ... | ... | 2·5 | Fine, from 9·45 a.m. until after 10 a.m. Fresh breeze during day. Light clouds in forenoon. Afternoon and evening dull. |
| 17 | 0·029 | ... | 5·0 | ... | Cloudy and dull after 12·15 p.m. Morning cold. |
| 18 | 0·022 | 4·0 | 6·0 | 5·0 | Cloudy, dull, and cold. Light rain all forenoon from 7 a.m. Light clouds in the evening. |
| 19 | 0·057 | 4·0 | 5·0 | 4·5 | Fine, between 6·45 p.m. and 8·30 p.m., and again after 9·25 p.m. Lightning, W., at 8·10 p.m., and E., at 9·15 p.m. Lunar halo, 9·20 p.m. Forenoon dull. |
| 20 | 0·081 | 4·5 | 4·5 | 4·5 | Fine, from 6 p.m. until after 7 p.m. Forenoon and afternoon dull. Lunar halo, 9·58 p.m. Atmosphere dry during day. |
| 21 | 0·080 | 3·5 | 5·0 | 4·3 | Fine and cloudy alternately. Warm. Partial lunar halo at 9·15 p.m. Atmosphere very dry all day. |
| 22 | 0·082 | 5·0 | 4·0 | 4·5 | Fine, after 4 p.m. Warm throughout. Morning dull. Dark clouds, S. and E., at 9 a.m., like an approaching storm. |
| 23 | 0·083 | ... | ... | 1·8 | Fine and warm throughout. Very dry wind. Meteor observed, from W. to N.E., at 6·45 p.m. |
| 24 | 0·081 | 4·0 | 5·5 | 4·8 | Forenoon fine until 12 p.m., and again after 8 p.m. Storm of wind, 4 p.m., from W. Light rain from 4·41 p.m. until after 7·30 p.m. Lightning, N.W., all evening. Warm day. |
| 25 | 0·115 | 4·5 | 4·5 | 4·5 | Fine, cold. Very strong wind and dry. Wind lulled towards evening. Lightning, S.E. and E.S.E. at 9·10 p.m. |
| 26 | 0·094 | 4·0 | 4·5 | 4·3 | Fine, cold. Strong dry wind during day ; wind lulled towards evening. Horizon hazy-looking in the evening. |
| 27 | 0·022 | 5·0 | 5·0 | 5·0 | Morning fine, and again from 9·45 p.m. until midnight. Dull during day, and cold. Drops of rain 4·27 p.m. Light steady rain at 5 p.m. |
| 28 | 0·083 | 3·5 | 4·5 | 4·0 | Afternoon cloudy from 2 p.m. ; the clouds were light, and cleared towards evening. Forenoon warm. Dry breeze. |
| 29 | 0·032 | 2·0 | 5·0 | 3·5 | Very cloudy and dull. Fine at 10·15 a.m., soon turned cloudy again. Light shower about 5 p.m. |
| 30 | 0·088 | ... | ... | 2·5 | Fine. Strong breeze. Wind lulled about 4·30 p.m. |
| | Sum. | | | | |
| Means | 1·672 | 3·7 | 5·3 | 4·3 | |

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.

Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

Heavy dew 2nd, 12th, 13th, and 15th. Ozone papers, 12th and 17th, faulty.

| Date. | Self-registering Barometer at 32°. | | | | | Self-registering Anemometer. | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mean. | Max. | Hour. | Min. | Hour. | S. | S.S.W. | S.W. | W.S.W. | W. | W.N.W. | N.W. | N.N.W. | N. | N.N.E. | N.E. | E.N.E. | E. | E.S.E. | S.E. | S.S.E. | Velocity. Total. Miles. | Velocity. Mean. pr. hr. | Mean Pressure. lbs. | Greatest Pressure. Direction of Wind. Time. |
| 1 | 29·935 | 29·970 | 9 a.m. | 29·895 | 3 p.m. | ... | ... | ... | 1 | 6 | 1 | ... | 1 | 2 | 7 | 4 | 2 | ... | ... | ... | ... | 138 | 5·8 | 0·2 | 0·8 E.N.E. 4 3 p.m. |
| 2 | 29·874 | 29·990 | 9 &10a.m. | 29·770 | 6 a.m. | ... | ... | ... | ... | 6 | 1 | ... | 2 | 12 | 1 | ... | ... | ... | 1 | ... | 1 | 124 | 5·2 | 0·1 | 1·4 N. 6 57 p.m. |
| 3 | 29·599 | 29·755 | 9 a.m. | 29·500 | 12 p.m. & 1 a.m. | ... | ... | ... | ... | 2 | 3 | 2 | 1 | 10 | 4 | 2 | ... | ... | ... | ... | ... | 344 | 14·3 | 1·0 | 3·1 N.N.E. 5 5 p.m. |
| 4 | 29·624 | 29·705 | 8 a.m. | 29·505 | 1 p.m. | ... | ... | ... | ... | 3 | 14 | 6 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 547 | 22·8 | 2·6 | 15·7 W.N.W. 12 0 p.m. |
| 5 | 29·836 | 29·980 | 8 a.m. | 29·700 | 1 p.m. | ... | ... | ... | 3 | 18 | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 362 | 15·1 | 1·1 | 3·9 W. 12 0 p.m. |
| 6 | 29·988 | 30·020 | 8 a.m. | 29·945 | 2 & 4 p.m. | ... | 2 | 2 | 1 | 13 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 5 | ... | 195 | 8·1 | 0·3 | 1·3 W. 7 47 a.m. |
| 7 | 30·069 | 30·115 | 8 a.m. | 30·020 | 3 p.m. | 3 | 4 | ... | 2 | 14 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 218 | 9·1 | 0·4 | 1·3 S. 4 10 p.m. |
| 8 | 30·082 | 30·120 | 9 & 10a.m. | 30·050 | 3 & 4 p.m. | 5 | 6 | ... | 2 | 10 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 214 | 8·9 | 0·4 | 1·6 S. 2 55 p.m. |
| 9 | 30·103 | 30·165 | 8 a.m. | 30·050 | 2, 3, & 4 p.m. | 7 | 3 | 2 | 5 | 3 | 4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 253 | 10·5 | 0·6 | 2·0 SW. 2 30 a.m. |
| 10 | 30·172 | 30·300 | 10 a.m. | 30·070 | 5, 6, & 8 a.m. | 2 | 6 | 2 | 2 | 11 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 268 | 11·2 | 0·6 | 2·2 S. 2 5 p.m. |
| 11 | 29·810 | 29·955 | 9 a.m. | 29·730 | 5 a.m. | ... | 4 | 1 | 1 | 13 | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 197 | 8·2 | 0·3 | 1·3 W.N.W. 4 20 a.m. |
| 12 | 29·698 | 29·765 | 9 a.m. | 29·660 | 5 a.m. | ... | ... | ... | ... | 7 | 10 | 1 | 1 | 2 | 3 | ... | ... | ... | ... | ... | ... | 165 | 6·9 | 0·2 | 0·8 W.N.W. 4 25 a.m. |
| 13 | 29·755 | 29·865 | 8 a.m. | 29·650 | 2 p.m. | 1 | 3 | 1 | 2 | 16 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 280 | 11·7 | 0·7 | 2·0 S.W. 7 25 p.m. |
| 14 | 29·885 | 29·905 | 8 to 12 p.m. | 29·845 | 2 p.m. | 3 | 3 | 1 | 1 | 8 | 8 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 193 | 8·0 | 0·3 | 1·3 W. 10 55 a.m. |
| 15 | 29·784 | 29·900 | 9 a.m. | 29·730 | 5 p.m. | ... | ... | ... | 4 | 11 | 4 | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 225 | 9·4 | 0·4 | 2·0 W.S.W. 11 4 p.m. |
| 16 | 29·757 | 29·845 | 8 a.m. | 29·700 | 3, 4, & 5 p.m. | ... | ... | 1 | 6 | 13 | 2 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 269 | 11·2 | 0·6 | 3·1 W. 10 45 a.m. |
| 17 | 29·818 | 29·865 | 10 a.m. | 29·750 | 8 a.m. | 7 | ... | 1 | ... | 3 | 8 | ... | ... | ... | 5 | ... | ... | ... | ... | ... | ... | 152 | 6·3 | 0·2 | 2·2 N.N.E. 7 15 a.m. |
| 18 | 29·668 | 29·775 | 9 a.m. | 29·640 | 4 p.m. | ... | ... | ... | ... | ... | 3 | 1 | 3 | 2 | 12 | 3 | ... | ... | ... | ... | ... | 395 | 16·5 | 1·4 | 3·9 N.N.E. 9 30 p.m. |
| 19 | ..... | ..... | ..... | ..... | ..... | ... | ... | ... | ... | 1 | 1 | 2 | 6 | 12 | 2 | ... | ... | ... | ... | ... | ... | 219 | 9·1 | 0·4 | 1·3 N.N.W. 11 30 a.m. |
| 20 | 29·510 | 29·590 | 9 a.m. | 29·465 | 2 & 3 p.m. | ... | ... | ... | ... | ... | 5 | 6 | 9 | 4 | ... | ... | ... | ... | ... | ... | ... | 317 | 13·2 | 0·9 | 2·9 W.N.W. 4 45 a.m. |
| 21 | 29·485 | 29·555 | 9 & 10a.m. | 29·450 | 4 p.m. | ... | ... | ... | ... | ... | 10 | 6 | 8 | ... | ... | ... | ... | ... | ... | ... | ... | 275 | 11·5 | 0·7 | 2·0 W.N.W. 12 15 p.m. |
| 22 | 29·350 | 29·470 | 9 &10a.m. | 29·290 | 3 a.m. | ... | ... | ... | 2 | 2 | 1 | 9 | 2 | 6 | ... | 2 | ... | ... | ... | ... | ... | 221 | 9·2 | 0·4 | 2·2 W. 5 42 a.m. |
| 23 | 29·490 | 29·565 | 8 a.m. | 29·395 | 1 p.m. | ... | ... | ... | 2 | 9 | 11 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 329 | 13·7 | 0·9 | 5·8 W. 10 15 a.m. |
| 24 | 29·484 | 29·585 | 8 a.m. | 29·410 | 3 p.m. | ... | ... | 1 | 4 | 9 | 1 | 6 | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | 321 | 13·4 | 0·9 | 4·5 W.S.W. 8 58 a.m. |
| 25 | ..... | ..... | ..... | ..... | ..... | ... | ... | ... | 8 | 13 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | .. | 502 | 20·9 | 2·2 | 6·8 W. 2 32 p.m. |
| 26 | 29·739 | 29·805 | 10 p.m. | 29·700 | 1, 2, & 3 p.m. | ... | ... | 1 | 2 | 18 | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 339 | 14·1 | 1·0 | 8·0 W.S.W. 12 28 p.m. |
| 27 | ..... | ..... | ..... | ..... | ..... | ... | ... | ... | ... | 8 | 4 | 5 | 5 | 2 | ... | ... | ... | ... | ... | ... | ... | 159 | 6·6 | 0·2 | 1·6 N.N.E. 7 40 p.m. |
| 28 | 29·741 | 29·815 | 6 a.m. | 29·645 | 1 & 2 p.m. | ... | ... | ... | 10 | 10 | 1 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 279 | 11·6 | 0·7 | 4·2 W.S.W. 12 48 p.m. |
| 29 | 29·630 | 29·845 | 10 a.m. | 29·420 | 5 a.m. | ... | ... | ... | 1 | 3 | 7 | 2 | 4 | 7 | ... | ... | ... | ... | ... | ... | ... | 182 | 7·6 | 0·3 | 5·4 W.N.W. 8 22 p.m. |
| 30 | 29·534 | 29·605 | 10 p.m. | 29·440 | 12 a.m. & 1 p.m. | ... | ... | 1 | 5 | 6 | 7 | 4 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 331 | 13·8 | 0·9 | 12·0 W.S.W. 2 20 p.m. |
| Sums or Means. | 29·756 | June 10th. 30·300 | 10 a.m. | June 22nd. 29·290 | 3 a.m. | 28 | 31 | 14 | 65 | 236 | 124 | 68 | 52 | 50 | 32 | 11 | 2 | ... | 1 | 5 | 1 | Sum 8013 | Mean. 11·1 | Mean. 0·7 | |

The self-registering Barometer is photographic, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour. Photography failed 19th, 25th, 27th, and partly on 7th, and 26th.

# ABSTRACT FROM METEOROLOGICAL STATIONS,

## For the Month of JUNE, 1872.

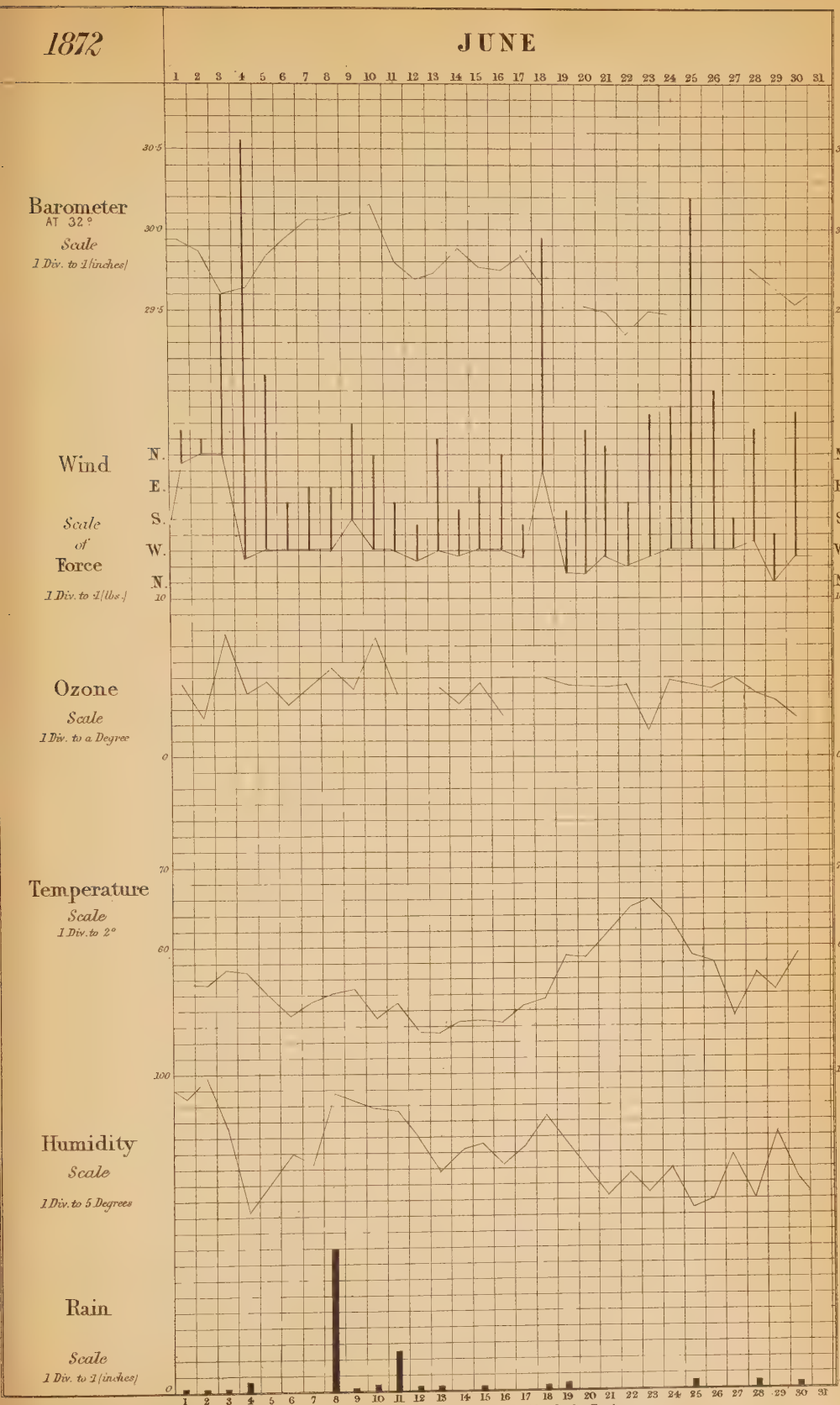
| Stations. | Least Distance from East Coast in miles. | Height above sea in feet. | Mean of Observations taken at 9 a.m., June, 1872. | | | | | | | | | | For 24h, previous to 9 a.m. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Barometer. | Temperature in Shade. | Humidity 0 to 100. | Wind. | | Clouds. 0 to 10. | Temperature in Shade. | | | | Rain. | | | | Evaporation in inches. |
| | | | | | | Direction | Force. 0-6 | | Mean. Max. | Mean. Min. | Extreme Max. | Extreme Min. | Total Fall, inches. | No. of Days | Greatest Fall, inches. | Date | |
| Tenterfield | 80 | ... | ... | 48·8 | ... | W.N.W. | 1·9 | 5·8 | 60·6 | 37·0 | 69·2 | 24·6 | 1·370 | 7 | 0·610 | 1 | 1·784 |
| Grafton | 22 | ... | ... | 53·6 | ... | W. | 0·4 | 1·9 | 65·5 | 41·7 | 73·2 | 32·2 | 0·975 | 3 | 0·685 | 1 | 1·942 |
| Bourke | 393 | ... | ... | 55·5 | ... | N.W. | 0·1 | 4·5 | 62·9 | 48·0 | 76·9 | 36·9 | 2·136 | 6 | 1·046 | 11 | ... |
| Narrabri | 196 | ... | ... | 57·6 | ... | N.W. | 1·1 | 3·4 | 68·8 | 46·4 | 80·9 | 28·5 | 1·670 | 6 | 0·830 | 11 | 3·016 |
| Armidale | 80 | 3278 | 30·176 | 45·8 | 81·0 | W. | 1·4 | 4·2 | 53·2 | 38·3 | 64·2 | 27·1 | 1·520 | 7 | 0·560 | 1 | 2·383 |
| Port Macquarie | 0 | ... | ... | 56·6 | ... | S.W. | 1·6 | 2·7 | 66·1 | 47·0 | 77·6 | 37·7 | 0·678 | 7 | 0·250 | 10 | 3·526 |
| Murrurundi | 94 | 1545 | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Cassilis | 120 | ... | ... | 49·6 | ... | W | 0·4 | ... | 59·6 | 39·6 | 72·1 | 27·2 | 2·130 | 7 | 1·200 | 25 | ... |
| Muswellbrook | 68 | ... | ... | ... | ... | N.W. | 2·4 | ... | ... | 44·0 | ... | 30·3 | 1·830 | 3 | 1·470 | 25 | 2·192 |
| Dubbo | 182 | ... | ... | 51·8 | ... | N.N.E. | 0·2 | ... | 59·4 | 44·2 | 62·9 | 35·9 | 2·860 | 14 | 0·870 | 4 | ... |
| Mudgee | 121 | ... | ... | 50·3 | ... | W. | 1·1 | ... | 59·3 | 41·3 | 66·4 | 29·0 | 3·600 | 12 | 1·280 | 4 | ... |
| Dalwood | 27 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 0·800 | 6 | 0·430 | 24 | ... |
| West Maitland | 18 | ... | ... | 53·4 | ... | W. | 1·0 | 3·5 | 60·5 | 46·2 | 74·2 | 31·4 | 0·810 | 7 | 0·270 | 25 | ... |
| Lambton | 7 | ... | ... | 53·0 | ... | W. | 1·8 | ... | 64·2 | 41·7 | 78·3 | 28·0 | 0·730 | 8 | 0·220 | 4 | 1·800 |
| Newcastle | 1 | 112 | 29·991 | 56·5 | 80·0 | N.W. | 0·4 | 3·0 | 64·1 | 48·8 | 76·3 | 38·3 | 0·790 | 8 | 0·200 | 4 | ... |
| Orange | 124 | 2891 | ... | 43·2 | ... | S. | 1·2 | ... | 48·7 | 37·6 | 55·7 | 24·7 | 7·570 | 16 | 1·260 | 30 | ... |
| Bathurst | 96 | 2333 | 29·911 | 45·7 | 91·0 | N.W. | 1·2 | 7·4 | 56·8 | 34·5 | 70·0 | 22·0 | 1·820 | 7 | 0·590 | 4 | ... |
| Kurrajong | 35 | 1870 | ... | 47·5 | ... | W. | ... | ... | 53·1 | 41·8 | 63·0 | 33·0 | 0·650 | 5 | 0·280 | 10 | ... |
| Mount Victoria | 61 | 3496 | 29·952 | 44·0 | 84·0 | W. | 0·2 | 6·6 | 50·3 | 37·7 | 61·6 | 26·9 | 1·290 | 11 | 0·300 | 25 | 2·153 |
| Woodford | 50 | 2192 | 30·021 | 47·7 | ... | W. | 0·2 | ... | ... | 45·5 | ... | 39·4 | 0·580 | 8 | 0·190 | 25 | ... |
| Parramatta | 16 | ... | ... | 55·7 | ... | N.W. | 1·2 | 4·3 | 63·3 | 48·0 | 70·6 | 34·7 | 0·340 | 3 | 0·130 | 8 | ... |
| Sydney | 5 | 155 | 29·996 | 55·5 | 74·9 | W. | 0·7 | 5·6 | 62·0 | 49·0 | 74·7 | 39·9 | 1·355 | 12 | 0·893 | 8 | 1·672 |
| Liverpool | 16 | ... | 29·943 | 53·7 | ... | ..... | ... | ... | 66·7 | 40·7 | 73·0 | 29·0 | 0·281 | 12 | 0·120 | 4 | ... |
| Wentworth | 476 | ... | ... | 52·8 | ... | N.W. | 2·0 | ... | 61·3 | 44·3 | 76·3 | 32·3 | 2·540 | 11 | 0·700 | 18 | 2·195 |
| Wilton | 13 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 0·230 | 2 | 0·150 | 4 | ... |
| Cordeaux River | 10 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 0·340 | 6 | 0·110 | 4 | ... |
| Young | 140 | ... | ... | 46·2 | ... | S.W. | 1·2 | ... | 56·0 | 36·3 | 65·0 | 23·1 | 5·670 | 13 | 1·500 | 30 | 2·183 |
| Wollongong | 0 | ... | ... | 54·8 | ... | W. | 1·6 | ... | 61·5 | 48·1 | 70·4 | 39·7 | ... | ... | ... | ... | ... |
| Moss Vale | 31 | ... | ... | 45·1 | ... | W.N.W. | 1·2 | ... | 51·3 | 38·9 | 61·4 | 26·8 | 0·580 | 5 | 0·200 | 23 | ... |
| Goulburn | 54 | 2129 | 30·160 | 45·6 | 81·0 | W. | 0·0 | 5·8 | 56·6 | 34·5 | 65·8 | 18·4 | 1·940 | 9 | 0·540 | 23 | ... |
| Terrara | 0 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 0·470 | 5 | 0·180 | 4 | ... |
| Wagga Wagga | 161 | ... | ... | 46·8 | ... | W. | 0·7 | ... | 53·5 | 40·1 | 63·1 | 27·9 | 6·620 | 15 | 1·400 | 30 | ... |
| Cape St. George | 0 | 175 | 29·901 | 54·6 | 76·0 | W. | 1·4 | 4·4 | 61·1 | 48·1 | 70·2 | 40·6 | 0·595 | 5 | 0·510 | 8 | ... |
| Queanbeyan | 60 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Urana | 218 | ... | ... | 44·9 | ... | N.E. | ... | ... | 54·7 | 35·1 | 58·1 | 29·1 | 6·840 | 12 | 0·950 | 20 | 0·863 |
| Deniliquin | 287 | 410 | 30·044 | 50·7 | 88·0 | N.W. | 1·3 | 5·1 | 60·2 | 41·2 | 68·6 | 30·2 | 3·890 | 10 | 1·230 | 3 | ... |
| Kiandra | 88 | 4640 | 29·952 | 33·3 | 81·0 | N.W. | 0·4 | 7·4 | 41·8 | 24·7 | 51·1 | 8·3 | 10·300 | 13 | 1·200 | 29 | ... |
| Cooma | 52 | 2637 | ... | ... | ... | S. | 2·2 | 7·5 | ... | 28·6 | ... | 14·8 | 0·770 | 5 | 0·380 | 24 | 0·425 |
| Albury | 175 | 572 | ... | 49·0 | ... | W. | 0·5 | ... | 59·4 | 38·5 | 67·4 | 24·3 | 7·400 | 12 | 1·850 | 4 | ... |
| Eden | 0 | 107 | 29·866 | 54·2 | 82·0 | S.W. | 1·3 | 4·7 | 61·0 | 47·7 | 67·0 | 39·1 | 0·830 | 7 | 0·410 | 4 | ... |

Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only twelve of the stations have barometers.

## REMARKS.

Tenterfield—Thunder showers, 21st.
Grafton—Heavy fogs during month.
Bourke—Foggy, 1st; cold, 4th; and frosty, 6th.
Narrabri—Heavy frosts during month.
Armidale—Foggy, 1st and 7th; sleet, 5th; ice, on 7th.
Port Macquarie - Squally, 7th, 8th, and 10th.
Muswellbrook—Hot wind and thunderstorm, 24th; cold, 14th and 15th.
Mudgee—Frost, 6th, 7th, and 14th; dense fog, 12th.
West Maitland—Foggy and cold during month; sharp frost 15th.
Lambton—Thunderstorm, 25th.
Newcastle—Thick fog, 1st, 2nd, and 3rd; heavy sea, 12th and 16th.
Orange—Hard frost, and foggy during month; thunderstorms, 20th and 22nd.
Bathurst—Sharp frost, 15th; foggy, 12th.
Kurrajong—Squally and frosty during month.
Mount Victoria—Stormy during month; frosty, 12th and 13th.
Parramatta—Thick fog, 1st; and cold during month.
Sydney—Foggy, 1st, 2nd, 3rd, and 12th; very cold, 4th, 12th, 13th, and 14th; High wind, 24th.
Liverpool—Sharp frosts and strong W. winds prevalent.
Wentworth—Foggy, 6th; frost, 12th and 13th; heavy rain, 18th and 28th.
Cordeaux River—Strong W. winds and frost during month.
Young—Very heavy thunderstorm, 19th.
Wollongong—No rain has been recorded.
Moss Vale—Windy and cold, 4th and 5th; thunder squall, 19th.
Goulburn—Sharp frost, 13th.
Terrara—Strong westerly winds during month.
Wagga Wagga—Dense fog, 13th and 14th; foggy, 26th and 27th.
Cape St. George—Westerly gales and squalls frequent.
Urana—Thunderstorms, 20th and 30th; foggy and frosty during month.
Deniliquin—Thunderstorms, 2nd, 21st, and 24th; frosty and foggy during month.
Kiandra—Heavy thunder and hail-storm, 21st; unusual rainfall; snow 5 feet 10 inches during month.
Cooma—Frosty and stormy; hardest frost known on 11th.
Albury—W. winds, 4th and 5th; fogs and frosts during month.

# METEOROLOGICAL CURVES




*The dark vertical lines represent Force of Wind & Rain.*

Lithographed at the Surveyor Generals Office, Sydney. Aug. 1872

*Barometer results for 13th 25th and 27th not given owing to failure of Photography*

*Heavy Dew on 2nd 12th 13th and 15th*

# METEOROLOGICAL OBSERVATIONS

MADE AT THE

# GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

# ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

# MONTH OF JULY, 1872;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER

1872.

[Price, 6d.] Su 32—72

# METEOROLOGICAL OBSERVATIONS.

## GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s

Magnetic Variation 9° 32′ 41″ East.

### JULY, 1872.

### GENERAL ABSTRACT.

| | | | | |
|---|---|---|---|---|
| **BAROMETER** .. At 32° Fah. | Highest Reading ... | ... 30·240 | ... | On the 6th, at 9 & 10 a.m. |
| | Lowest Reading ... | ... 29·250 | ... | On the 21st, at 4 a.m. |
| | Mean Height ... | ... 29·799 | | |

(Being 0·141 in. less than that in the same month on an average of the preceding 13 years.)

| | | | | |
|---|---|---|---|---|
| **WIND** .. .. | Greatest Pressure... | ... 20·5 lbs. | ... | On the 1st. |
| | Mean Pressure ... | ... 1·0 lb. | | |
| | Number of Days Calm ... | 0 | | |
| | Prevailing Direction | ... W. | | |

(Prevailing direction during the same month for the preceding 13 years W.N.W.)

| | | | | |
|---|---|---|---|---|
| **TEMPERATURE** | Highest in the Shade | ... 71·2 | ... | On the 24th. |
| | Lowest in the Shade | ... 40·1 | ... | On the 19th. |
| | Greatest Range ... | ... 26·2 | ... | On the 24th. |
| | Highest in the Sun | ... 104·8 | ... | On the 24th. |
| | Highest in a Black Box with Glass Top ... | ... 147·2 | ... | On the 31st. |
| | Lowest on the Grass | ... 34·3 | ... | On the 4th. |
| | Mean Diurnal Range | ... 13·7 | | |
| | Mean in the Shade | ... 53·1 | | |

(Being 0·7 greater than that of the same month on an average of the preceding 13 years.)

| | | | | |
|---|---|---|---|---|
| **HUMIDITY** .. | Greatest Amount... | ... 100·0 | ... | On the 6th, 7th, 8th, and 20th. |
| | Least ... ... | ... 38·0 | ... | On the 24th. |
| | Mean ... ... | ... 74·1 | | |

(Being 1·9 greater than that of the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **RAIN** .. .. | Greatest Fall ... | ... 0·488 inch. | On the 22nd. |
| | Number of Days ... | ... 7 rain and 5 dew. | |
| | Total Fall ... ... | 0·604 inch. | 65 ft. above the ground. |
| | | 0·976 inch. | 15 inches above the ground. |

(Being 2·920 inches less than that of the same month on an average of the preceding 13 years.)

**EVAPORATION** Total Amount ... ... 2·052 inches.

| | | |
|---|---|---|
| **OZONE** .. .. | Mean Amount ... ... | 5·0 |

(Being 0·2 greater than that in the same month on an average of the preceding 11 years.)

| | | |
|---|---|---|
| **ELECTRICITY** .. | Number of Days Lightning | 7 |
| **CLOUDY SKY** .. | Mean Amount ... ... | 4·8 |
| | Number of Clear Days ... | 6 |
| **METEORS** .. | Number Observed ... | 2 |

#### REMARKS.

The Barometer was unsteady throughout the month, and some very cold weather was experienced, but the Mean Temperature was 0·7 above the average for the month. On the 1st, a westerly gale of wind extended over the Colony; at Cooma it was severe, and at Sydney the force rose to 20·5 lbs. on the square foot at 2 p.m. At the Coast Stations, especially the northern ones, little rain fell; but inland the rainfall was greater, and at Orange amounted to 4½ inches. Frosts were frequent, and snow fell on 14 days; on the 21st at Mount Victoria, on the 27th at Orange and Cooma, on the 30th at Bathurst, and on the 1st, 2nd, 9th, 10th, 11th, 12th, 19th, 25th, 26th, 27th, and 28th, at Kiandra. A hot wind continued all the morning of the 24th at Sydney.

## SYDNEY, JULY, 1872.

| Date. | Moon's Phases. | Standard Barometer at 9 a.m., corrected to Mean Sea Level. | Wind. | | Temperature. | | | | | | | | Humidity. 0-100. | Rain. Inches. | Cl'ds Sky. 0-10. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Dry. | Wet. | Shade. | | | | Sun. | Grass. | Sea Water. 9 a.m. | | | |
| | | | Prevailing Direction. | Total Velocity. Miles. | Mean 9.3.9. | Mean 9.3.9. | Max. | Min. | Range | Mean. | Max. | Min. | | Mean 9.3.9. | | Taken at 9, 3 & 9. |
| 1 | | 29·740 | W.N.W. | 759 | 58·2 | 50·5 | 63·9 | 50·1 | 13·8 | 57·0 | 88·0 | 38·4 | 58·1 | 58·7 | ·0 | 0·0 |
| 2 | | ·728 | W. | 491 | 54·3 | 47·7 | 58·9 | 51·9 | 7·0 | 55·4 | 94·1 | 45·1 | 58·3 | 61·7 | ·0 | 1·0 |
| 3 | | 30·169 | W. | 170 | 50·6 | 46·5 | 59·6 | 45·9 | 13·7 | 52·8 | 95·5 | 38·1 | 58·1 | 74·3 | ·0 | 0·0 |
| 4 | | ·234 | W. | 188 | 50·1 | 46·2 | 61·7 | 40·6 | 21·1 | 51·2 | 94·5 | 34·3 | 57·7 | 76·0 | ·0 | 0·0 |
| 5 | G. N. Dec. | ·358 | W. | 206 | 51·6 | 48·1 | 59·8 | 42·6 | 17·2 | 51·2 | 92·2 | 36·3 | 57·9 | 77·3 | 0·001 | 5·3 |
| 6 | New Moon | ·464 | W. | 83 | 51·8 | 50·8 | 55·3 | 45·6 | 9·7 | 50·5 | 76·3 | 44·0 | 57·7 | 92·7 | 0·129 | 10·0 |
| 7 | Apogee. | ·395 | N.E. | 109 | 47·3 | 47·3 | 58·6 | 44·8 | 13·8 | 51·7 | 96·7 | 41·1 | 57·9 | 100·0 | 0·062 | 1·0 |
| 8 | | ·266 | W. | 116 | 52·5 | 51·4 | 59·0 | 43·5 | 15·5 | 51·3 | 96·6 | 40·4 | 57·7 | 93·0 | 0·006 | 2·0 |
| 9 | | ·099 | W. | 140 | 53·1 | 51·8 | 59·2 | 44·6 | 14·6 | 51·9 | 95·0 | 42·5 | 57·3 | 91·7 | 0·006 | 4·0 |
| 10 | | 29·885 | N.W. | 307 | 53·7 | 50·8 | 59·0 | 44·6 | 14·4 | 51·8 | 83·0 | 43·9 | 57·1 | 81·7 | 0·008 | 6·7 |
| 11 | | ·868 | W.N.W. | 398 | 55·0 | 47·6 | 60·3 | 49·6 | 10·7 | 55·0 | 95·0 | 40·5 | 57·3 | 59·0 | 0·030 | 2·0 |
| 12 | | 30·019 | W. | 245 | 54·3 | 48·3 | 61·4 | 48·0 | 13·4 | 54·7 | 95·8 | 41·1 | 57·1 | 64·7 | ·0 | 8·0 |
| 13 | In Equat. | 29·954 | W. | 237 | 54·8 | 50·1 | 59·3 | 48·1 | 11·2 | 53·7 | 72·0 | 43·1 | 57·0 | 71·3 | ·0 | 10·0 |
| 14 | First Qr. | ·894 | W.S.W. | 348 | 48·0 | 43·8 | 60·0 | 47·8 | 12·2 | 53·9 | 97·0 | 42·1 | 56·9 | 71·0 | ·0 | 8·0 |
| 15 | | 30·063 | S.S.W. | 477 | 53·6 | 47·9 | 57·1 | 48·1 | 9·0 | 52·6 | 76·6 | 43·1 | 57·2 | 65·3 | ·0 | 10·0 |
| 16 | | ·287 | S.S.W. | 451 | 54·7 | 52·2 | 59·3 | 50·6 | 8·7 | 55·0 | 92·5 | 47·9 | 56·9 | 83·7 | ·0 | 10·0 |
| 17 | | ·278 | S.S.W. | 318 | 51·6 | 49·0 | 54·2 | 49·8 | 4·4 | 52·0 | 79·0 | 43·8 | 57·0 | 82·0 | 0·155 | 10·0 |
| 18 | | ·100 | W. | 120 | 51·0 | 46·8 | 57·6 | 46·2 | 11·4 | 51·9 | 98·0 | 41·1 | 57·2 | 73·0 | ·0 | 6·3 |
| 19 | G. S. Dec. | 29·997 | W. | 113 | 49·9 | 47·0 | 59·4 | 40·1 | 19·3 | 49·8 | 96·6 | 34·6 | 56·8 | 82·7 | 0·002 | 6·3 |
| 20 | Full M'n. Perigee. | ·802 | N.W. | 171 | 52·1 | 49·7 | 57·3 | 43·1 | 14·2 | 50·2 | 75·5 | 39·3 | 57·0 | 84·7 | 0·088 | 10·0 |
| 21 | | ·641 | W. | 431 | 46·6 | 45·5 | 58·0 | 44·6 | 13·4 | 51·3 | 96·6 | 38·2 | 56·7 | 91·0 | ·0 | 10·0 |
| 22 | | ·525 | S.W. | 592 | 54·3 | 49·6 | 58·2 | 46·6 | 11·6 | 52·4 | 86·1 | 42·6 | 57·1 | 70·7 | 0·488 | 10·0 |
| 23 | | ·936 | W. | 127 | 52·4 | 48·5 | 59·6 | 47·6 | 12·0 | 53·6 | 96·6 | 41·1 | 56·9 | 75·0 | ·0 | 3·3 |
| 24 | | ·919 | N.W. | 290 | 58·7 | 49·6 | 71·2 | 45·0 | 26·2 | 58·1 | 104·8 | 36·6 | 57·3 | 55·3 | 0·001 | 5·3 |
| 25 | In Equat. | ·883 | W. | 394 | 59·7 | 52·9 | 68·1 | 50·6 | 17·5 | 59·4 | 102·1 | 48·1 | 57·2 | 62·3 | ·0 | 6·7 |
| 26 | | ·870 | W.N.W. | ... | 56·5 | 48·2 | 63·1 | 49·9 | 13·2 | 56·5 | 97·9 | 43·1 | 56·9 | 55·7 | ·0 | 0·0 |
| 27 | Last Qr. | ·829 | W. | 485 | 53·9 | 46·3 | 60·4 | 50·6 | 9·8 | 55·5 | 95·7 | 45·1 | 56·7 | 57·0 | ·0 | 0·3 |
| 28 | | 30·130 | W. | 369 | 50·7 | 45·6 | 60·1 | 48·2 | 11·9 | 54·2 | 98·0 | 37·9 | 57·1 | 67·0 | ·0 | 0·0 |
| 29 | | ·276 | W. | 181 | 50·4 | 45·7 | 60·1 | 43·6 | 16·5 | 51·9 | 96·1 | 37·1 | 56·7 | 71·0 | ·0 | 0·0 |
| 30 | | ·135 | W. | 228 | 50·0 | 45·8 | 59·2 | 40·6 | 18·6 | 49·9 | 97·1 | 34·5 | 57·3 | 73·3 | ·0 | 0·7 |
| 31 | | ·131 | W. | 187 | 49·3 | 45·1 | 59·1 | 41·2 | 17·9 | 50·2 | 95·8 | 35·2 | 57·0 | 72·7 | ·0 | 0·7 |
| Means | ..... | 30·028 | W. | 8731 | 52·6 | 48·3 | 59·9 | 46·3 | 13·7 | 53·1 | 92·2 | 40·7 | 57·3 | 74·1 | Sum. 0·976 | 4·8 |

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.
Direction, Velocity, and Pressure of the Wind, deducted from 24 hourly records of Robinson's Anemometer.
The Barometer at 9 a.m. reads 0·027 above the true mean for the day.

## SYDNEY, JULY, 1872.

| Date. | Evaporation. Inches. | Ozone, 0-10. Day. | Night. | Mean. | Remarks. |
|---|---|---|---|---|---|
| 1 | 0·156 | 4·0 | 5·0 | 4·5 | Fine. Strong gale all afternoon and evening. Very light rain at 6·5 p.m. |
| 2 | 0·110 | 4·0 | 5·5 | 4·8 | Cloudy from 9·45 a.m. until noon, and again from 4 p.m until 5·30 p.m. Partial rainbow S.S.E., 4.30 p.m. Strong dry wind. Drops of rain, 5·3 p m. Lightning N., during evening. |
| 3 | 0·033 | 4·0 | 6·0 | 5·0 | Fine. Cold. Evening hazy, and dew falling. |
| 4 | 0·045 | 1·5 | 6·0 | 3·8 | No clouds during the day and very cold. Evening hazy, and dew falling. |
| 5 | 0·035 | 3·0 | 8·5 | 5·8 | Cold, cloudy, and dull from 11 a.m. until 6·30 p.m. At 9 p.m., clouds began to form again. |
| 6 | 0·001 | 8·0 | 8·5 | 8·3 | Cloudy and cold. Light showers during day. Evening very dull. |
| 7 | 0·028 | ... | ... | 4·8 | Morning foggy-looking and cold. Fine throughout the day. |
| 8 | 0·011 | 8·0 | 9·0 | 8·5 | Dense fog all morning, until 8 a.m. Atmosphere very thick. Heavy dew falling in the evening. |
| 9 | 0·010 | 7·5 | 2·5 | 5·0 | Dense fog from midnight until 10·15 a.m. Evening hazy, cloudy from 7 p.m. until about 8·30 p.m. |
| 10 | 0·048 | 6·0 | 7·0 | 6·5 | Fine after 6 p.m. Fresh breeze during day, dull. Light rain nearly all forenoon from 8 a.m. Lightning E.N.E., all evening. |
| 11 | 0·104 | 4·5 | 5·5 | 5·0 | Fine until after 1 p.m., and again in the evening after 6 p.m. Fresh breeze during day. Evening cold. |
| 12 | 0·070 | 4·5 | 4·0 | 4·3 | Light clouds during day. Clouds cleared about noon until after 1 p.m., and again after 5·30 p.m. Lunar ring all evening, 40° diameter. |
| 13 | 0·054 | 4·5 | 5·5 | 5·0 | Clouds unbroken during day, and very dull. Drops of rain, 10·35 a.m. Morning very foggy-looking. |
| 14 | 0·086 | ... | ... | 2·8 | Fine from 10 a.m. until 3 p.m. Afternoon cloudy and fine alternately. Lightning E., during evening. |
| 15 | 0·100 | 4·0 | 5·0 | 4·5 | Cloudy and dull, like rain. Atmosphere dry and very clear in the morning. Drops of rain at 7·50 p.m. |
| 16 | ... | 5·0 | 8·5 | 6·8 | Cloudy, cold, and stormy. Drops of rain at 8·20 a.m. Afternoon and evening showery. |
| 17 | 0·060 | 5·0 | 5·0 | 5·0 | Cloudy. Heavy shower at 8·31 and 9·28 a.m. Light rain at intervals during evening. Lunar halo 9 p.m. Afternoon dull. |
| 18 | 0·038 | 5·0 | 5·5 | 5·3 | Forenoon fine from about 9 a.m. until noon. Clouds in afternoon and evening were very light. Lunar halo 5·55 p m. Light dew in the evening. |
| 19 | 0·035 | 2·0 | 5·0 | 3·5 | Forenoon fine until 2·30 p.m., and again at 9·50 p.m. Evening cold and dew falling, with Lunar halos at intervals Atmosphere very dry in the afternoon. |
| 20 | 0·022 | 5·5 | 6·0 | 5·8 | Cloudy. Very dull. Light steady rain all morning until 9·15 a.m. |
| 21 | 0·106 | ... | ... | 5·0 | Cloudy. Cold—partial clearing of clouds in forenoon. Began to rain about 3·50 p.m., and rained nearly all evening. |
| 22 | 0·110 | 5·5 | 6·0 | 5·8 | Cloudy, dull. Forenoon and afternoon stormy. Light rain at 7·40 a.m. and 11·30 a.m., and dropping at 7·52 p.m. and 9 p.m. Rainbow S. at 12·23 p m. |
| 23 | 0·031 | 3·0 | 4·5 | 3·8 | Cloudy from 8 a.m. until 9·30 a.m., and again light clouds from 1 p.m. until 2 p.m. Evening cold and heavy dew falling. |
| 24 | 0·113 | 1·5 | 5·0 | 3·3 | Cloudy and fine alternately. Very dry hot wind all forenoon. Atmosphere after midnight very watery. |
| 25 | 0·104 | 4·5 | 5·5 | 5·0 | Forenoon cloudy and fine. Afternoon cloudy, and evening fine after 7 30 p.m. Fresh breeze all evening. Zodiacal light after sunset. |
| 26 | 0·162 | 3·5 | 5·5 | 4·5 | Fine. Strong dry wind. Zodiacal light all evening 50° altitude, after 8 p.m. Lightning from N.E. to to S.E. all evening. |
| 27 | 0·110 | 4·5 | 6·0 | 5·3 | Fine, strong dry breeze. Evening cold and no clouds. Lightning S S.E. and S.E. all evening—also Zodiacal light. Two meteors, one 7·56 p.m. S.W., the other 8·2 p.m. S. |
| 28 | 0·106 | ... | ... | 2·8 | Fine, strong dry breeze. Atmosphere very clear in the afternoon. Zodiacal light all evening. |
| 29 | 0·040 | 3·5 | 5·0 | 4·3 | Fine, cold, and smoky. No clouds in the morning or evening. Evening hazy and dew falling. Zodiacal light all evening. |
| 30 | 0·070 | 4·0 | 5·5 | 4·8 | Cold. Cloudy from about 1·45 p.m. until after 2 p.m. Again at 5·30 p.m. until 7·30 p.m. Forenoon smoky. Lightning N.E. at 7 p.m. |
| 31 | 0·054 | 4·0 | 5·0 | 4·5 | Fine, cold. Atmosphere very clear in forenoon. Light dew falling in the evening. Lightning E.S.E. all evening after 9 p.m. |
| | Sum. | | | | |
| Means | 2·052 | 4·4 | 5·8 | 5·0 | |

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.

Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

Dew 5th, 8th, 9th, 19th, and 24th.

| Date. | Self-registering Barometer at 32°. | | | | | Self-registering Anemometer. | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mean. | Max. | Hour. | Min. | Hour. | S. | S.S.W. | S.W. | W.S.W. | W. | W.N.W. | N.W. | N.N.W. | N. | N.N.E. | N.E. | E.N.E. | E. | E.S.E. | S.E. | S.S.E. | Velocity. Total. Miles. | Velocity. Mean. pr. hr. | Mean Pressure. lbs. | Greatest Pressure. Direction of Wind. Time. | | |
| 1 | 29·452 | 29·540 | 9 a.m. | 29·395 | 2 p.m. | ... | ... | ... | 1 | 3 | 17 | 1 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | 759 | 31·6 | 5·0 | 20·5 | W. | 2·10 p.m. |
| 2 | 29·713 | 29·910 | 8 a.m. | 29·525 | 9 a.m. | ... | ... | ... | 11 | 12 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 491 | 20·5 | 2·1 | 12·5 | W. | 2·40 p.m. |
| 3 | 29·958 | 30·005 | 8 a.m. | 29·900 | 1, 2, & 3 p.m. | 3 | 1 | ... | 2 | 14 | 4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 170 | 7·1 | 0·3 | 1·8 | W. | 10·18 a.m. |
| 4 | 30·000 | 30·105 | 8 a.m. | 29·910 | 3 p.m. | 2 | 1 | 1 | 2 | 14 | 4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 188 | 7·8 | 0·3 | 1·1 | W. | 3·10 a.m. |
| 5 | 30·155 | 30·215 | 8 a.m. | 30·100 | 1, 2, 3, & 4 p.m. | 6 | 5 | 1 | 2 | 9 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 206 | 8·6 | 0·4 | 1·8 | S. | 3·20 p.m. |
| 6 | 30·165 | 30·240 | 9 & 10a.m. | 30·125 | 4 a.m. | ... | ... | ... | ... | 8 | ... | 1 | 5 | 2 | 2 | 1 | 1 | 3 | 1 | ... | ... | 83 | 3·5 | 0·1 | 0·5 | N.N.E. | 8·30 p.m. |
| 7 | 30·068 | 30·170 | 10 a.m. | 30·010 | 5 a.m. | ... | ... | ... | ... | 5 | 6 | 4 | ... | ... | ... | 7 | 2 | ... | ... | ... | ... | 109 | 4·5 | 0·1 | 0·6 | E.N.E. | 4· 0 p.m. |
| 8 | 29·924 | 30·040 | 9 & 10a.m. | 29·855 | 6 a.m. | ... | ... | ... | ... | 10 | 3 | ... | 1 | 3 | 1 | 5 | 1 | ... | ... | ... | ... | 116 | 4·8 | 0·1 | 0·7 | N.E. | 4· 0 p.m. |
| 9 | 29·759 | 29·870 | 9 & 10a.m. | 29·675 | 6 a.m. | ... | ... | ... | ... | 5 | 5 | 5 | 1 | ... | 4 | 2 | 1 | ... | 1 | ... | ... | 140 | 5·8 | 0·2 | 1·4 | N.N.E. | 7·45 p.m. |
| 10 | 29·574 | 29·680 | 9 & 10a.m. | 29·500 | 5 p.m. | ... | ... | ... | ... | 2 | 4 | 12 | 4 | 1 | 1 | ... | ... | ... | ... | ... | ... | 307 | 12·8 | 0·8 | 3·9 | N.N.W. | 8·12 p.m. |
| 11 | 29·694 | 29·780 | 8 a.m. | 29·600 | 1 & 2 p.m. | ... | ... | ... | ... | 7 | 15 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 398 | 16·6 | 1·4 | 5·8 | W.N.W. | 12· 0 p.m. |
| 12 | 29·768 | 29·805 | 9 & 10a.m. | 29·740 | 4 a.m. | ... | ... | 2 | 1 | 13 | 6 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 245 | 10·2 | 0·5 | 4·2 | W. | 12·5 p.m. |
| 13 | 29·630 | 29·750 | 10 a.m. | 29·580 | 3 a.m. | ... | ... | ... | 4 | 6 | 4 | 4 | 3 | 2 | 1 | ... | ... | ... | ... | ... | ... | 237 | 9·9 | 0·5 | 4·5 | W.S.W. | 5·25 a.m. |
| 14 | 29·740 | 29·830 | 8 a.m. | 29·660 | 1 & 2 p.m. | 3 | 1 | 1 | 13 | 6 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 348 | 14·5 | 1·1 | 3·6 | W.S.W. | 7·55 a.m. |
| 15 | 30·018 | 30·160 | 8 a.m. | 29·930 | 12 a.m. & 1 p.m. | ... | 13 | 9 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 477 | 19·9 | 2·0 | 5·8 | S.S.W. | 12·35 p.m. |
| 16 | 30·174 | 30·185 | 10 p.m. | 30·150 | 2 p.m. | 4 | 14 | 5 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 451 | 18·8 | 1·8 | 5·1 | S.S.W. | 11·20 a.m. |
| 17 | 30·044 | 30·180 | 9 & 10a.m. | 29·950 | 4 & 5 a.m. | ... | 12 | 5 | 3 | 4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 318 | 13·3 | 0·9 | 3·1 | S.S.W. | 12·17 p.m. |
| 18 | 29·768 | 29·860 | 9 & 10a.m. | 29·745 | 3 to 5 p.m., & 2 to 5 a.m. | ... | ... | ... | ... | 12 | ... | ... | 1 | ... | 7 | 4 | ... | ... | ... | ... | ... | 120 | 5·0 | 0·1 | 0·4 | N.E. | 6· 0 p.m. |
| 19 | 29·669 | 29·770 | 9 & 10a.m. | 29·550 | 6 a.m. | ... | ... | 1 | 2 | 13 | 1 | ... | ... | ... | ... | ... | ... | 2 | 5 | ... | ... | 113 | 4·7 | 0·1 | 1·4 | W.N.W. | 8· 8 a.m. |
| 20 | 29·485 | 29·600 | 9 a.m. | 29·450 | 3 and 4 p.m.; 5 and 6 a.m. | ... | ... | ... | 1 | 6 | 5 | 7 | 2 | 3 | ... | ... | ... | ... | ... | ... | ... | 171 | 7·1 | 0·3 | 1·4 | N.W. | 2·30 p.m. |
| 21 | 29·336 | 29·435 | 9 & 10a.m. | 29·250 | 4 a.m. | ... | ... | 3 | 1 | 13 | 7 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 431 | 18·0 | 1·6 | 8·8 | S.W. | 7·53 a.m. |
| 22 | 29·516 | 29·700 | 8 a.m. | 29·320 | 10 a.m. | ... | 4 | 8 | 7 | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 592 | 24·7 | 3·1 | 13·5 | S.S.W. | 2·55 p.m., & 4·38 p.m. |
| 23 | 29·713 | 29·750 | 10 a.m., and 11 and 12 p.m. | 29·665 | 2 p.m. | ... | 2 | 3 | 3 | 9 | 1 | 1 | ... | ... | ... | ... | ... | ... | 4 | 1 | ... | 127 | 5·3 | 0·1 | 1·4 | W. | 9·35 a.m. |
| 24 | ..... | ..... | ..... | ..... | ..... | ... | ... | ... | 2 | 3 | 9 | 10 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 290 | 12·1 | 0·7 | 3·4 | W.N.W. | 2·37 p.m. |
| 25 | 29·641 | 29·665 | 9 & 11 p.m. | 29·600 | 1 to 5 p.m. | ... | ... | ... | 4 | 10 | 10 | ... | ... | ... | ... | ... | ... | ... | ... | ... | .. | 394 | 16·4 | 1·3 | 3·1 | W.S.W | 4·38 p.m. |
| 26 | 29·638 | 29·700 | 9 a.m. | 29·565 | 2 p.m. | ... | ... | ... | ... | 3 | 16 | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ..... | ..... |
| 27 | 29·742 | 29·890 | 8 a.m. | 29·620 | 2 p.m. | ... | ... | ... | 7 | 16 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 485 | 20·2 | 2·0 | 10·1 | W. | 11·24 a.m. |
| 28 | 29·942 | 30·020 | 8 a.m. | 29·870 | 2 & 3 p.m. | ... | ... | 2 | 5 | 17 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 369 | 15·4 | 1·2 | 3·6 | W. | 10·50 a.m. |
| 29 | 29·933 | 30·030 | 9 a.m. | 29·900 | 3 to 5 p.m.; 4 to 7 a.m. | ... | ... | ... | 2 | 15 | ... | 1 | ... | 1 | ... | ... | 2 | 3 | ... | ... | ... | 181 | 7·5 | 0·3 | 2·2 | W.S.W. | 9·55 a.m. |
| 30 | 29·860 | 29·900 | 9 & 10a.m. | 29·820 | 3 p.m. | 3 | 2 | 2 | 2 | 14 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 228 | 9·5 | 0·5 | 1·3 | W. | 3· 8 a.m. |
| 31 | 29·870 | 29·910 | 8 a.m. | 29·820 | 2 p.m. | 1 | ... | ... | 3 | 15 | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | 3 | ... | 187 | 7·8 | 0·3 | 1·3 | W. | 10·52 a.m. |
| Sums or Means. | 29·799 | July 6th. 30·240 | 9 & 10 a.m. | July 21st. 29·250 | 4 a.m. | 22 | 55 | 43 | 81 | 269 | 121 | 55 | 19 | 12 | 16 | 19 | 8 | 8 | 12 | 4 | ... | Sum 8731 | Mean. 12·1 | Mean. 1·0 | | | |

The self-registering Barometer is photographic, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour.

## ABSTRACT FROM METEOROLOGICAL STATIONS,

### For the Month of JULY, 1872.

| Stations. | Least Distance from East Coast in miles. | Height above sea in feet. | Mean of Observations taken at 9 a.m., July, 1872. | | | | | | | | | | For 24h, previous to 9 a.m. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Barometer. | Temperature in Shade. | Humidity 0 to 100. | Wind. | | Clouds 0-10. | Temperature in Shade. | | | | Rain. | | | | Evaporation in inches. |
| | | | | | | Direction | Force. 0-6 | | Mean. Max. | Mean. Min. | Extreme Max. | Extreme Min. | Total Fall, inches. | No. of Days | Greatest Fall, inches. | Date | |
| Tenterfield ..... | 80 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Grafton ..... | 22 | ... | ... | 51·3 | ... | W. | 0·1 | ... | 65·1 | 37·4 | 69·7 | 31·9 | 0·591 | 6 | 0·160 | 6 | 1·281 |
| Bourke..... | 393 | ... | ... | 50·6 | ... | S.S.W. | 0·5 | 1·4 | 59·1 | 42·1 | 67·9 | 30·9 | 1·920 | 5 | 0·650 | 14 | ... |
| Narrabri ..... | 196 | ... | ... | 52·6 | ... | W. | 0·6 | 3·0 | 64·8 | 40·3 | 72·9 | 29·5 | 2·260 | 6 | 1·250 | 14 | 2·174 |
| Armidale..... | 80 | 3278 | 30·199 | 42·9 | 85·0 | S.W. | 1·4 | 4·1 | 50·4 | 35·3 | 58·2 | 25·1 | 2·190 | 8 | 0·720 | 11 | 2·121 |
| Port Macquarie | 0 | ... | ... | 54·4 | ... | S.W. | 1·5 | 2·6 | 64·3 | 44·5 | 73·6 | 34·6 | 0·510 | 8 | 0·140 | * | 4·385 |
| Murrurundi ... | 94 | 1545 | ... | 46·3 | ... | W. | 1·2 | 5·0 | 54·7 | 37·9 | 61·1 | 28·3 | 2·203 | 5 | 0·743 | 22 | ... |
| Cassilis ..... | 120 | ... | ... | 45·7 | ... | N.W. | 0·1 | ... | 56·2 | 35·2 | 65·1 | 26·2 | 0·970 | 2 | 0·700 | 20 | ... |
| Muswellbrook.. | 68 | 475 | ... | 50·3 | ... | N.W. | 1·1 | ... | 60·9 | 39·7 | 67·5 | 28·3 | 0·290 | 2 | 0·210 | 22 | 2·189 |
| Dubbo ..... | 182 | ... | ... | 48·8 | ... | N.E. | 0·5 | ... | 56·0 | 41·6 | 59·9 | 28·9 | 1·550 | 7 | 0·560 | 11 | 2·171 |
| Mudgee ..... | 121 | ... | ... | 45·2 | ... | W. | 0·7 | ... | 53·4 | 37·0 | 59·4 | 28·0 | 1·580 | 7 | 0·740 | 11 | ... |
| Dalwood ..... | 27 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 0·640 | 5 | 0·220 | 20 | ... |
| West Maitland | 18 | ... | ... | 52·2 | ... | W. | 0·9 | 3·0 | 59·4 | 45·0 | 67·1 | 36·3 | 0·720 | 6 | 0·360 | 22 | 3·594 |
| Lambton ..... | 7 | ... | ... | 50·7 | ... | W. | 1·6 | ... | 61·4 | 39·9 | 68·3 | 28·0 | 1·130 | 7 | 0·340 | 17 | 1·993 |
| Newcastle ..... | 1 | 112 | 30·020 | 54·1 | 79·0 | N.W. | 0·6 | 2·6 | 61·8 | 46·3 | 70·8 | 40·1 | 0·930 | 6 | 0·250 | 6 | ... |
| Orange..... | 124 | 2891 | ... | 40·9 | ... | S. | 1·8 | ... | 48·1 | 33·7 | 53·3 | 28·1 | 4·450 | 13 | 0·940 | 11 | 4·174 |
| Bathurst ..... | 96 | 2200 | 30·065 | 43·3 | 88·0 | W. | 1·1 | 6·0 | 54·9 | 31·7 | 63·0 | 24·0 | 2·150 | 9 | 0·530 | 22 | ... |
| Kurrajong ..... | 35 | 1870 | ... | 44·8 | ... | W. | ... | ... | 51·8 | 37·8 | 61·0 | 31·0 | 0·770 | 6 | 0·200 | 21 | ... |
| Mount Victoria | 61 | 3490 | 30·026 | 39·8 | 82·0 | W. | 0·2 | 4·9 | 46·7 | 32·9 | 53·6 | 24·1 | 0·950 | 11 | 0·300 | 1 | 1·502 |
| Woodford ..... | 50 | 2192 | 30·024 | 48·2 | ... | W. | 0·1 | ... | 53·6 | 42·7 | 60·4 | 38·4 | 0·780 | 6 | 0·310 | 22 | ... |
| Parramatta..... | 16 | ... | ... | 52·3 | ... | N.W. | 1·0 | 4·9 | 60·9 | 43·7 | 66·3 | 31·2 | 0·980 | 5 | 0·450 | 22 | ... |
| Sydney..... | 5 | 155 | 30·028 | 53·1 | 74·1 | W. | 1·0 | 4·8 | 59·9 | 46·3 | 71·2 | 40·1 | 0·976 | 7 | 0·488 | 22 | 2·052 |
| Liverpool..... | 16 | ... | 29·964 | 48·1 | ... | ..... | ... | 3·7 | 58·8 | 37·3 | 67·0 | 27·0 | 0·811 | 11 | 0·440 | 22 | ... |
| Wentworth..... | 476 | ... | ... | 51·0 | ... | N.W. | 2·0 | ... | 58·8 | 43·1 | 63·2 | 37·0 | 1·480 | 9 | 0·250 | 21 | 2·257 |
| Wilton ..... | 13 | ... | ... | ... | ... | ..... | .. | ... | ... | ... | ... | ... | 1·070 | 5 | 0·440 | 22 | ... |
| Cordeaux River | 10 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 1·440 | 7 | 0·720 | 22 | ... |
| Young ..... | 140 | ... | ... | 42·9 | ... | S.W. | 1·3 | ... | 52 8 | 32·9 | 56 0 | 26·1 | 2·870 | 8 | 0·860 | 26 | 2·801 |
| Wollongong ... | 0 | ... | ... | 52·0 | ... | W. | 1·6 | ... | 58·7 | 45·2 | 64·4 | 37·7 | 2·110 | 3 | 0·940 | 21 | 2·763 |
| Moss Vale ..... | 31 | ... | ... | 42·6 | ... | W. | 1·8 | ... | 49·1 | 36·1 | 55·4 | 29·8 | 2·000 | 8 | 1·200 | 22 | ... |
| Goulburn..... | 54 | 2129 | 29·990 | 43·2 | 88·0 | W. | 0·7 | 3·7 | 53·9 | 32·4 | 59·2 | 22·3 | 1·810 | 9 | 0·390 | 11 | ... |
| Terrara..... | 4 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 1·330 | 7 | 0·860 | 22 | ... |
| Wagga Wagga | 161 | ... | ... | 46·5 | ... | W. | 0·6 | ... | 54·4 | 38·6 | 59·1 | 30·9 | 1·810 | 12 | 0·270 | 2 | 1·804 |
| Cape St. George | 0 | 175 | 29·932 | 50·9 | 72·0 | W. | 1·7 | 4·4 | 57·6 | 44·2 | 64·2 | 38·6 | 1·890 | 8 | 1·600 | 22 | ... |
| Queanbeyan ... | 60 | ... | ... | 37·2 | ... | W. | 0·4 | ... | 41·2 | 33·1 | 48 2 | 25·1 | 1·900 | 8 | 0·720 | 11 | 1·961 |
| Urana ..... | 218 | ... | ... | 45·6 | ... | W. | ... | ... | 56·0 | 35·2 | 59·1 | 31·1 | 3·590 | 8 | 0·950 | 12 | 1·036 |
| Deniliquin ..... | 287 | 410 | 30·116 | 48·6 | 87·0 | N.W. | 1·2 | 3·1 | 58·7 | 38·4 | 64·6 | 32·2 | 1·730 | 11 | 0·350 | 10 | ... |
| Kiandra ..... | 88 | 4640 | 30·057 | 31·0 | 66·0 | N.W. | 0·6 | 5·2 | 44·7 | 17·2 | 55·5 | † | 0·350 | 3 | 0·200 | 10 | ... |
| Cooma ..... | 52 | 2637 | ... | 41·2 | ... | S. | 2·7 | 6·2 | 54·2 | 28·2 | 66·6 | 15·8 | 0·350 | 5 | 0·160 | 22 | 0·419 |
| Albury ..... | 175 | 572 | ... | 47·3 | ... | W. | 0·5 | 5·7 | 60·2 | 34·3 | 73·4 | 26·3 | 2·910 | 11 | 0·620 | 1 | ... |
| Eden..... | 0 | 107 | 29·917 | 51·9 | 77·0 | S.W. | 1·7 | 6·3 | 58·5 | 45·2 | 64·0 | 37·1 | 1·430 | 7 | 1·040 | 22 | ... |

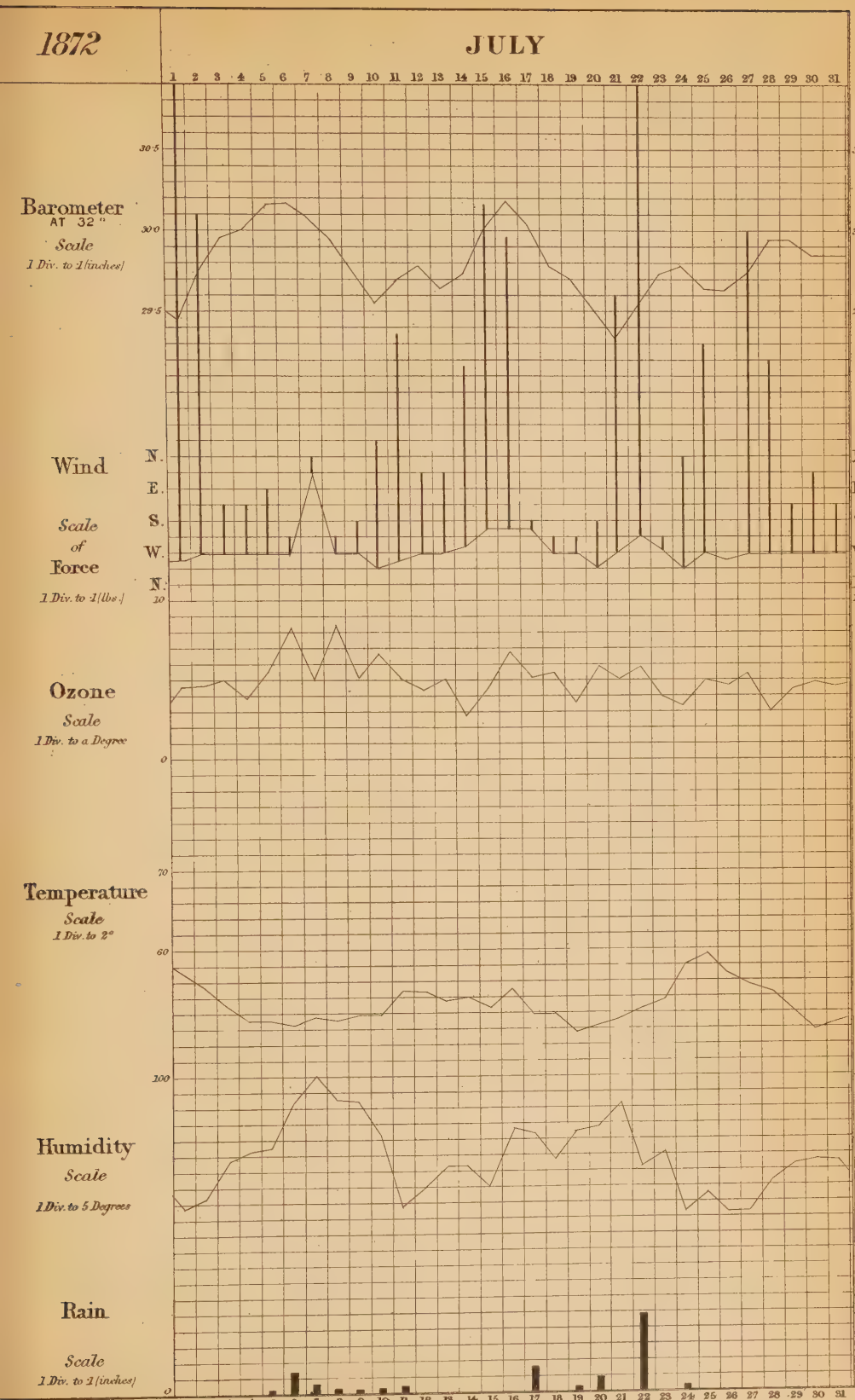
* 8th and 9th. † 2° below zero.

Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only twelve of the stations have barometers.

## REMARKS.

Grafton—Foggy during month.
Bourke—Thunderstorm, 19th; cold, 22nd, and frosty during month.
Armidale—Ice, 4th and 5th; and storm, 20th.
Port Macquarie—Thunderstorms, 14th, 20th, and 30th; squally, 16th and 22nd.
Muswellbrook—Foggy, 7th, 8th, and 9th; and heavy thunderstorm, 20th.
Mudgee—Dense fog, 4th; severe frost, 5th; storm 20th, and frosty, 31st.
West Maitland—Heavy thunderstorm, 20th; stormy, 1st, 2nd, and 27th; cold and foggy during month.
Newcastle—Foggy, 6th, 8th, and 9th; heavy sea, 7th, 16th, 17th, and 18th; stormy, 16th.
Orange—Snowing, 27th; foggy, 30th; frosty during month.
Bathurst—Frost during month; snow, 30th.
Kurrajong—Violent squalls, 1st, 11th, and 21st; frosty during month.
Mount Victoria—Snowing, 21st; stormy, foggy, and frosty during month.
Parramatta—Strong W. wind, 1st.
Sydney—Gale, 1st; foggy and cold during month; stormy, 16th and 22nd; hot wind, 24th.
Liverpool—Violent W. wind, 1st, 2nd, and 11th; frosty and foggy during month.
Wentworth—Stormy, 1st and 21st; sharp frost, 5th; cold, 15th and 17th.
Cordeaux River—Heavy frost, 20th; strong W. winds all month.
Moss Vale—Heavy frost, 4th; foggy and cold during month.
Goulburn—Frost, 8th; foggy, 10th.
Cape St. George—W. gales, 1st, 2nd, 12th, and 26th; S. gales, 15th, 16th, 17th, 18th, and 23rd; thunderstorms, 21st and 22nd.
Queanbeyan—Frosty and cold during month; thunderstorm, 20th; S.S.W. gale, 22nd.
Urana—Frosty, 17th.
Deniliquin—Foggy, 16th and 30th; frosty, 22nd and 23rd; N.W. gale, 25th; W. gale, 26th.
Kiandra—8 feet 3½ in. snow fell, and foggy during month.
Cooma—Frosty all month; hurricane, 1st; stormy, 1st and 22nd; snow, 27th.
Albury—Squally, 1st; foggy and frosty during month.
Eden—W. gales during month; heavy sea, 16th.

# METEOROLOGICAL CURVES




*The dark vertical lines represent Force of Wind & Rain.*

Lithographed at the Surveyor Generals Office, Sydney, Sep. 1872

*Force of Wind on 1st 5 lbs. & on the 22nd 31 lbs. no results on 26th*
*Heavy Dew 5th 8th 9th 19th & 24th*

# METEOROLOGICAL OBSERVATIONS

MADE AT THE

# GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

# ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

# MONTH OF AUGUST, 1872;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1872.

[*Price*, 6*d*.] 3*u* 38—72

# METEOROLOGICAL OBSERVATIONS.

## GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s

Magnetic Variation 9° 32′ 41″ East.

## AUGUST, 1872.

### GENERAL ABSTRACT.

**BAROMETER** .. At 32° Fah. { Highest Reading ... ... 30·245 ... On the 14th, at 9 a.m.
Lowest Reading ... ... 29·360 ... On the 26th, at 2 & 3 p.m.
Mean Height ... ... 29·883

(Being 0·088 in. less than that in the same month on an average of the preceding 13 years.)

**WIND** .. .. Greatest Pressure... ... 23·8 lbs.... On the 22nd.
Mean Pressure ... ... 1·0 lb.
Number of Days Calm ... 0
Prevailing Direction ... W.

(Prevailing direction during the same month for the preceding 13 years W.N.W.)

**TEMPERATURE** Highest in the Shade ... 69·1 ... On the 31st.
Lowest in the Shade ... 36·8 ... On the 3rd.
Greatest Range ... ... 25·4 ... On the 3rd.
Highest in the Sun ... 105·3 ... On the 31st.
Highest in a Black Box with Glass Top ... ... 157·0 ... On the 19th.
Lowest on the Grass ... 28·1 ... On the 3rd.
Mean Diurnal Range ... 15·2
Mean in the Shade ... 52·0

(Being 2·4 less than that of the same month on an average of the preceding 13 years.)

**HUMIDITY** .. Greatest Amount... ... 100·0 ... On the 11th and 16th.
Least ... ... ... 39·0 ... On the 31st.
Mean ... ... ... 76·3

(Being 5·2 greater than that of the same month on an average of the preceding 13 years.)

**RAIN** .. .. Greatest Fall ... ... 0·927 inch. On the 17th.
Number of Days ... ... 16 rain and 6 dew.
Total Fall ... ... { 2·112 inches. 65 ft. above the ground.
2·972 inches. 15 inches above the ground.

(Being 0·141 inch less than that of the same month on an average of the preceding 13 years.)

**EVAPORATION** Total Amount ... ... 2·234 inches.

**OZONE** .. .. Mean Amount ... ... 5·2

(Being 0·6 greater than that in the same month on an average of the preceding 11 years.)

**ELECTRICITY** .. Number of Days Lightning 6

**CLOUDY SKY** .. Mean Amount ... ... 5·7
Number of Clear Days ,.. 1

**METEORS** .. Number Observed ... 1

### REMARKS.

The weather during the month was remarkably cold, with prevalent westerly wind. Snow fell on the 9th, 10th, 11th, 12th, 20th, and 27th at various parts of the Colony, not including Kiandra, at which place 4 ft. 2½ inches fell during the month. The falls on the 10th and 20th were the most general. At Armidale, Lambton, Orange, Bathurst, Mount Victoria, Moss Vale, Queanbeyan, Mount Imlay, Cordeaux River, and Terrara it was recorded on the 10th, and at Muswellbrook, Orange, Mount Victoria, Moss Vale, Dalwood, Branxton, Carcoar, and Woodford on the 20th. On the 20th snow was brought to Sydney by train, and throughout the day it could be seen from the Observatory in patches on the Blue Mountains. The rainfall at Sydney was rather less than the average, and at all the other Stations, except Kurrajong, Newcastle, and Lambton, it was under two inches. Hot winds were experienced at Sydney on the 26th, and at Wagga Wagga on the 30th ; and on the 3rd the min. grass thermometer at Sydney read 28·1, the lowest temperature, and the only frost recorded at the Sydney Observatory since its commencement.

## SYDNEY, AUGUST, 1872.

| Date. | Moon's Phases. | Standard Barometer at 9 a.m., corrected to Mean Sea Level. | Wind. | | Temperature. | | | | | | | | Humidity. 0-100. | Rain. Inches. | Cl'dy Sky. 0-10. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Dry. | Wet. | Shade. | | | | Sun. | Grass. | Sea Water. 9 a.m. | | |
| | | | Prevailing Direction. | Total Velocity. Miles. | Mean 9.3.9. | Mean 9.3.9. | Max. | Min. | Range | Mean. | Max. | Min. | | Mean 9.3.9. | | Taken at 9,3, & 9. |
| 1 | | 30·152 | W. | 206 | 50·7 | 44·6 | 61·1 | 41·6 | 19·5 | 51·4 | 96·5 | 34·1 | 57·2 | 64·0 | ·0 | 0·3 |
| 2 | G. N. Dec. | ·191 | W. | 190 | 49·1 | 45·1 | 55·3 | 45·0 | 10·3 | 50·2 | 92·5 | 39·7 | 56·7 | 74·3 | 0·045 | 4·0 |
| 3 | Apogee. | ·243 | N.W. | 278 | 51·7 | 43·2 | 62·2 | 36·8 | 25·4 | 49·5 | 96·3 | 28·1 | 56·3 | 54·3 | 0·001 | 0·7 |
| 4 | New | ·085 | W. | 303 | 54·3 | 48·3 | 65·1 | 42·6 | 22·5 | 53·9 | 95·0 | 41·8 | 56·0 | 64·0 | ·0 | 10·0 |
| 5 | | 29·905 | W. | 321 | 53·9 | 49·0 | 60·1 | 52·3 | 7·8 | 56·2 | 93·5 | 46·0 | 56·2 | 70·0 | 0·001 | 4·7 |
| 6 | | 30·133 | W.N.W. | 278 | 51·3 | 45·7 | 59·5 | 40·8 | 18·7 | 50·2 | 89·0 | 33·5 | 55·9 | 66·3 | 0·001 | 8·7 |
| 7 | | ·103 | W. | 250 | 53·7 | 47·2 | 63·5 | 46·1 | 17·4 | 54·8 | 96·2 | 39·4 | 55·7 | 63·3 | ·0 | 3·3 |
| 8 | | ·106 | E. | 108 | 49·8 | 45·5 | 58·3 | 44·3 | 14·0 | 51·3 | 96·0 | 37·1 | 56·0 | 72·3 | ·0 | 7·3 |
| 9 | In Equat. | 29·806 | W. | 187 | 46·0 | 44·9 | 48·3 | 41·9 | 6·4 | 45·1 | 76·7 | 35·9 | 55·7 | 91·7 | 0·022 | 10·0 |
| 10 | | ·806 | W.S.W. | 460 | 46·8 | 41·1 | 53·0 | 41·8 | 11·2 | 47·4 | 92·2 | 32·2 | 55·9 | 63·3 | 0·092 | 2·3 |
| 11 | | 30·156 | S.W. | 486 | 42·7 | 42·7 | 51·6 | 40·0 | 11·6 | 45·8 | 88·0 | 33·2 | 55·7 | 100·0 | 0·075 | 10·0 |
| 12 | First Qr. | ·395 | S.S.W. | 365 | 51·2 | 47·5 | 56·1 | 42·8 | 13·3 | 49·5 | 91·0 | 36·9 | 55·9 | 75·7 | 0·549 | 3·7 |
| 13 | | ·465 | W. | 137 | 49·7 | 47·2 | 58·6 | 41·5 | 17·1 | 50·1 | 96·0 | 35·6 | 55·7 | 83·0 | ·0 | 0·3 |
| 14 | | ·464 | W. | 153 | 51·9 | 48·2 | 59·4 | 41·9 | 17·5 | 50·7 | 100·3 | 35·9 | 56·1 | 76·3 | 0·001 | 6·3 |
| 15 | | ·402 | N.E. | 162 | 53·1 | 49·9 | 58·8 | 40·6 | 18·2 | 49·7 | 94·5 | 34·6 | 55·9 | 79·3 | 0·001 | 9·7 |
| 16 | G. S. Dec. | ·323 | W. | 143 | 51·7 | 50·6 | 59·7 | 45·6 | 14·1 | 52·7 | 96·8 | 40·1 | 56·3 | 92·3 | 0·031 | 9·3 |
| 17 | | ·312 | W. | 144 | 53·3 | 51·9 | 60·4 | 48·7 | 11·7 | 54·6 | 92·2 | 44·4 | 56·1 | 90·7 | 0·927 | 10·0 |
| 18 | Perigee | ·217 | W.N.W. | 127 | 50·6 | 50·0 | 62·9 | 46·8 | 16·1 | 54·9 | 102·7 | 41·6 | 56 3 | 95·0 | 0·002 | 6·0 |
| 19 | Full | ·027 | W. | 365 | 53·7 | 51·2 | 67·3 | 45·8 | 21·5 | 56·6 | 104·9 | 39·2 | 56·0 | 83·0 | 0·003 | 6·7 |
| 20 | | ·105 | W. | 461 | 49·6 | 46·4 | 59·4 | 42·7 | 16·7 | 51·1 | 89·2 | 38·3 | 55·7 | 78·3 | 0·523 | 7·3 |
| 21 | | ·142 | S.W. | 745 | 51·9 | 48·6 | 58·2 | 43·0 | 15·2 | 50·6 | 91·4 | 37·1 | 56·1 | 77·7 | ·0 | 9·7 |
| 22 | In Equat. | ·036 | S.S.W. | 756 | 52·0 | 49·2 | 53·6 | 47·9 | 5·7 | 50·8 | 59·9 | 42·6 | 55·9 | 80·7 | 0·248 | 10·0 |
| 23 | | ·116 | W. | 266 | 51·2 | 47·6 | 59·7 | 48·0 | 11·7 | 53·9 | 100·0 | 41·1 | 56·3 | 76·3 | 0·009 | 3 3 |
| 24 | | ·029 | W. | 193 | 53·4 | 48·4 | 60·6 | 45·8 | 14·8 | 53·2 | 97·1 | 38·1 | 56·1 | 70·0 | ·0 | 0·3 |
| 25 | | ·084 | N.N.E. | 281 | 48·0 | 45·3 | 60·3 | 41·1 | 19·2 | 50·7 | 97·8 | 35·2 | 56·4 | 80·0 | 0·001 | 0·0 |
| 26 | Last Qr. | 29·629 | W. | 397 | 55·9 | 49·2 | 66·8 | 42·9 | 23·9 | 54·9 | 102·0 | 36·1 | 56·2 | 64·0 | ·0 | 4·3 |
| 27 | | ·684 | W. | 362 | 50·2 | 46·9 | 58·7 | 49·6 | 9·1 | 54·2 | 83·8 | 42·1 | 56·3 | 77·7 | ·0 | 9·7 |
| 28 | | 30·101 | W. | 218 | 51·6 | 48·6 | 57·5 | 42·1 | 15·4 | 49·8 | 98·7 | 35·3 | 56·1 | 80·3 | 0·188 | 5·7 |
| 29 | G. N. Dec. | ·220 | N.W. | 84 | 53·3 | 50·1 | 59 0 | 46·2 | 12·8 | 52·6 | 97·7 | 39·9 | 56·1 | 79·7 | 0·023 | 2·7 |
| 30 | Apogee | ·179 | N.E. | 206 | 54·8 | 52·1 | 61·2 | 47·9 | 13·3 | 54·6 | 92·2 | 40·8 | 55·9 | 82·7 | 0·034 | 8·7 |
| 31 | | 29·924 | W.N.W. | 484 | 60·6 | 52·7 | 69·1 | 50·7 | 18·4 | 59·9 | 105·3 | 45·1 | 56·1 | 60·3 | 0·195 | 0·7 |
| Means | ..... | 30·114 | W. | 9116 | 51·5 | 47·7 | 59·5 | 44·3 | 15·2 | 52·0 | 93·7 | 38·1 | 56·1 | 76·3 | Sum. 2·972 | 5·7 |

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.

The Barometer at 9 a.m. reads 0·034 above the true mean for the day.

## SYDNEY, AUGUST, 1872.

| Date. | Evaporation. Inches. | Ozone, 0-10. Day. | Night. | Mean. | Remarks. |
|---|---|---|---|---|---|
| 1 | 0·051 | 5·0 | 4·5 | 4·8 | Fine. Morning cold. Atmosphere dry. Some clouds on horizon during the day. |
| 2 | 0·070 | 4·0 | 5·0 | 4·5 | Cloudy and dull until noon. Raining lightly in the morning. Evening very cold. |
| 3 | 0·110 | 1·5 | 5·0 | 3·3 | Cloudy from 9·30 a.m. until 2·30 p.m. Morning very cold. Cold also in the evening, and no clouds. Frost in the night. |
| 4 | 0·089 | ... | ... | 2·8 | Fine between 10 a.m. and 11 a.m. Light rain about 6 p.m. |
| 5 | 0·076 | 4·5 | 6·0 | 5·3 | Cloudy and dull until after 2 p.m., and from 4·30 p.m. until 7 p.m. Strong breeze all day, and cold. Dropping rain at 5·7 p.m. Lightning N.E. from 7 p.m. until 8·30 p.m. |
| 6 | 0·096 | 4·5 | 5·0 | 4·8 | Fine from 6·30 p.m. until after 7 p.m. Strong dry breeze during day, and dull. Fine again at 9·30 p.m. Cold. |
| 7 | 0·094 | 4·0 | 5·5 | 4·8 | Morning cloudy until 9·40 a.m. Cold. |
| 8 | 0·046 | 4·0 | 5·0 | 4·5 | Cloudy and dull until about 8·30 p.m. Evening hazy, light dew falling. Cold throughout the day. |
| 9 | 0·014 | 5·0 | 5·5 | 5·3 | Cloudy, dull, and cold. Light rain at intervals during day. |
| 10 | 0·103 | 5·0 | 5·5 | 5·3 | Cloudy between 4 p.m. and 6 p.m., and again at 9·15 p.m. Cold during day, and strong breeze. Evening very cold. Lightning E.N.E. 7·45 p.m. |
| 11 | ... | ... | ... | 5·0 | Cold. Heavy showers during day. Forenoon cloudy and fine alternately. Partial rainbow S.S.W., at 9·55 a.m. Thunder 2·29 p.m. and 4·26 p.m. Strong breeze. |
| 12 | 0·080 | 5·0 | 7·0 | 6·0 | Cloudy and dull until after 1 p.m. Cold. Strong breeze until evening. Evening hazy. |
| 13 | 0·038 | 2·5 | 8·0 | 5·3 | Fine. Foggy-looking in the evening, and cold; also dew falling. |
| 14 | 0·072 | 4·5 | 6·0 | 6·3 | Fine until after 1 p.m., when light clouds spread. Cloudy and fine alternately, after 6 p.m. |
| 15 | 0·031 | 5·0 | 4·5 | 4·8 | Light clouds all day. Lunar ring during evening. Raining at 11 p.m. |
| 16 | 0·085 | 5·0 | 6·0 | 5·5 | Cloudy and dull. Thunderstorm S.E., 12·30 a.m., with lightning in the N.E. Thunder also at 12·21 p.m. from W.N.W. Rained from 6·30 p.m. until 9 p.m. Lightning at 8·13 p.m. |
| 17 | 0·036 | 5·5 | 8·0 | 6·8 | Cloudy and dull. Dew falling in the evening. Lunar ring at 8·30 p.m. |
| 18 | 0·056 | ... | ... | 4·0 | Cloudy and fine alternately until evening. Evening beautifully clear. Light dew fell in the night. |
| 19 | ... | 5·0 | 9·0 | 7·0 | Afternoon and evening cloudy. Dropping rain at intervals after 3·10 p.m. Showers at 3 28 p.m. and 6·25 p.m. Lightning N.E. and S.E. at 6·35 p.m. |
| 20 | 0·106 | 4·0 | 5·0 | 4·5 | Cloudy and cold. Snow visible on the Blue Mountains. Afternoon and evening cloudy and fine alternately. Strong breeze all day. |
| 21 | 0·102 | 9·0 | 6·0 | 7·5 | Cloudy and dull. Drops of rain 1·48 p.m. Partial rainbow S.S.E, 2·37 p m., and rainbow S.E. at 4 p.m. Gale of wind during day. Afternoon and evening showery. |
| 22 | 0·083 | 4·0 | 6·0 | 5·0 | Cloudy and dull. Stormy. Forenoon and afternoon showery. Evening cold. Dropping rain at 9 p.m. |
| 23 | 0·072 | 4·5 | 7·0 | 5·8 | Fine after 11 a.m. Morning dull and cold. No clouds in evening, and cold; also hazy and dew falling. |
| 24 | 0·084 | 4·0 | 7·0 | 5·5 | Cloudy from 5·15 p.m. until 6·45 p.m. Cold day. Atmosphere very clear and dry. Evening hazy and dew falling. |
| 25 | 0·087 | ... | ... | 3·3 | Fine throughout the day and fresh breeze until evening. |
| 26 | 0·135 | 2·0 | 6·0 | 4·0 | Cloudy from 10·35 a.m. until 11·30 a.m, and again about 1·30 p.m. until after 4 p.m. Hot wind blowing. Meteor observed S.W. at 9·9 p.m. |
| 27 | 0·080 | 8·5 | 5·0 | 6·8 | Cloudy, dull, and cold. Light rain at intervals during day. Fine between 7 p.m. and 9 p.m. |
| 28 | 0·091 | 5·0 | 7·0 | 6·0 | Morning fine and cold until 10 a.m., and again from 10·45 a.m. until about 1 p.m. Light rain during the evening. Fresh breeze all day. |
| 29 | 0·048 | 6·0 | 5·0 | 5·5 | Cloudy and fine alternately during day. Raining lightly at 1·53 p.m., and also from 7·8 p.m. until about 7·30 p.m. |
| 30 | 0·025 | 5·5 | 8·0 | 6·8 | Cloudy and very dull, like rain. Lightning W.N.W. and N. at 10·5 p m. Thunderstorm W., at 11·50 p.m. Heavy shower after midnight. |
| 31 | 0·174 | 5·5 | 6 5 | 6·0 | Fine. Strong dry breeze. Cloudy at 4 p.m. Thunderstorm at 5 p.m. Shower at 5·44 p.m. Dropping rain again at 6·40 p.m. Lightning E.S.E., S.E., and N.E. during the evening. |
| | Sum | | | | |
| Means | 2·2234 | 4·7 | 6·1 | 5·2 | |

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.

Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

Heavy dew 3rd, 14th, 15th, 18th, 19th, and 25th.

| Date. | Self-registering Barometer at 32°. | | | | | Self-registering Anemometer. | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mean. | Max. | Hour. | Min. | Hour. | S. | S.S.W. | S.W. | W.S.W. | W. | W.N.W. | N.W. | N.N.W. | N. | N.N.E. | N.E. | E.N.E. | E. | E.S.E. | S.E. | S.S.E. | Velocity. Total. Miles. | Velocity. Mean. pr. hr. | Mean Pressure. lbs. | Greatest Pressure. Direction of Wind. Time. | |
| 1 | 29·867 | 29·930 | 8 a.m. | 29·805 | 4 p.m. | ... | ... | 2 | 3 | 10 | 8 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 206 | 8·6 | 0·4 | 3·1 | W. | 11·30 p.m. |
| 2 | 30·014 | 30·060 | 11 p.m. | 29·975 | 9 a.m. | 4 | 3 | 3 | 1 | 13 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 190 | 7·9 | 0·3 | 3·6 | S.S.W. | 12·34 p.m. |
| 3 | 29·881 | 30·000 | 9 & 10 a.m. | 29·835 | 5 a.m. | ... | ... | ... | ... | 1 | 9 | 11 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | 278 | 11·6 | 0·7 | 3·4 | N.W. | 2· 0 a.m. |
| 4 | 29·751 | 29·850 | 9 a.m. | 29·650 | 6 a.m. | ... | ... | ... | ... | 10 | 4 | 6 | 3 | 1 | ... | ... | ... | ... | ... | ... | ... | 303 | 12·6 | 0·8 | 3·1 | W. | 3·55 p.m. |
| 5 | 29·833 | 29·930 | 11 p.m. | 29·680 | 1 p.m. | 1 | ... | 7 | 2 | 12 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 321 | 13·4 | 0·9 | 5·4 | W. | 12·58 p.m. |
| 6 | 29·838 | 29·900 | 9 & 10 a.m. | 29·770 | 4 p.m. | ... | ... | ... | ... | 4 | 14 | 5 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 278 | 11·6 | 0·7 | 4·5 | W.N.W. | 3·35 p.m. |
| 7 | 29·827 | 29·875 | 9 & 10 a.m. | 29·760 | 3 & 4 p.m. | ... | ... | 1 | 1 | 14 | 7 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 250 | 10·4 | 0·5 | 2·4 | W.S.W. | 10·12 p.m. |
| 8 | 29·758 | 29·885 | 10 a.m. | 29·625 | 7 & 8 a.m. | ... | ... | 1 | ... | 6 | 4 | 1 | ... | 2 | ... | ... | ... | 9 | 1 | ... | ... | 108 | 4·5 | 0·1 | 0·7 | W. | 9·45 a.m. |
| 9 | 29·479 | 29·600 | 9 a.m. | 29·405 | 4 p.m. | ... | 1 | 1 | 5 | 15 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 187 | 7·8 | 0·3 | 3·9 | W.S.W. | 8·55 a.m. |
| 10 | 29·701 | 29·865 | 8 a.m. | 29·575 | 1 p.m. | ... | ... | 1 | 16 | 7 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 460 | 19·2 | 1·8 | 7·2 | W. | 9·35 a.m. |
| 11 | 30·021 | 30·130 | 8 a.m. | 29·905 | 9 & 10 a.m. | ... | 6 | 11 | 7 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 486 | 20·3 | 2·1 | 8·8 | S.S.W. | 11·35 a.m. |
| 12 | 30·153 | 30·200 | 7 & 8 a.m. | 30·120 | 3 & 4 p.m. | 3 | 10 | 1 | ... | 9 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 365 | 15·2 | 1·2 | 4·8 | S.S.W. | 12·15 p.m. |
| 13 | 30·189 | 30·225 | 8 a.m. | 30·150 | 2, 3, & 4 p.m. | 1 | 3 | 1 | ... | 9 | 4 | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 5 | 137 | 5·7 | 0·2 | 0·5 | S.S.W. | 11·40 a.m. |
| 14 | 30·181 | 30·245 | 9 a.m. | 30·160 | 2 to 5 p.m. | ... | ... | ... | 1 | 10 | 4 | ... | ... | ... | 3 | 5 | 1 | ... | ... | ... | ... | 153 | 6·4 | 0·2 | 0·8 | N.E. | 4·18 p.m. |
| 15 | 30·062 | 30·060 | 8 a.m. | 30·015 | 3 a.m. | 4 | 2 | ... | 3 | 1 | 1 | 1 | ... | 1 | 3 | 6 | ... | 1 | ... | 1 | ... | 162 | 6·8 | 0·2 | 1·4 | N.E. | 3·30 p.m. |
| 16 | 30·038 | 30·085 | 9 a.m. | 30·000 | 3 p.m. | 2 | .... | 1 | 2 | 12 | 2 | ... | ... | ... | ... | ... | 2 | 1 | ... | ... | 2 | 143 | 6·0 | 0·2 | 0·8 | E.N.E. | 12·48 p.m. |
| 17 | 30·001 | 30·065 | 10 a.m. | 29·955 | 5 a.m. | 4 | 5 | ... | 1 | 11 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 144 | 6·0 | 0·2 | 1·1 | S.S.W. | 1·22 p.m. |
| 18 | 29·864 | 29·975 | 9 a.m. | 29·800 | 4 a.m. | ... | ... | ... | ... | 5 | 9 | ... | ... | 2 | 1 | 2 | 4 | ... | 1 | ... | ... | 127 | 5·3 | 0·1 | 0·5 | E.N.E. | 3·17 p.m. |
| 19 | ..... | ..... | ..... | ..... | ..... | 3 | 1 | 5 | 3 | 7 | 4 | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 365 | 15·2 | 1·2 | 4·8 | S.W. | 8·10 p.m. |
| 20 | 29·969 | 30·010 | 10 p.m. | 29·920 | 10 & 12 a.m. | ... | 9 | 2 | 1 | 12 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 461 | 19·2 | 1·8 | 11·5 | S.S.W. | 10·35 a.m. |
| 21 | 29·942 | 29·995 | 8 & 9 p.m. | 29·870 | 6, 7 & 8 a.m. | ... | 12 | 11 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 745 | 31·0 | 4·8 | 20·5 | S.S.W. | 5·24 p.m. |
| 22 | 29·898 | 29·970 | 9 a.m. | 29·815 | 3 p.m. | ... | 16 | 3 | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 756 | 31·5 | 5·0 | 23·8 | S.S.W. | 8·35 a.m. |
| 23 | 29·852 | 29·955 | 9 a.m. | 29·800 | 5 p.m. | ... | 1 | ... | 2 | 10 | 3 | 2 | ... | ... | 1 | ... | ... | ... | 5 | ... | ... | 266 | 11·1 | 0·6 | 5·8 | W. | 8·58 a.m. |
| 24 | 29·887 | 29 935 | 10 & 11 p.m. | 29·825 | 3 p.m. | 7 | ... | ... | 4 | 12 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 193 | 8·0 | 0·3 | 3·1 | W.S.W. | 9·37 a.m. |
| 25 | 29·699 | 29·920 | 9 a.m. | 29·530 | 8 a.m. | ... | ... | ... | ... | 3 | 3 | 2 | ... | 4 | 8 | 4 | ... | ... | ... | ... | ... | 281 | 11·7 | 0·7 | 4·7 | N.N.E. | 6·30 p.m. |
| 26 | 29·463 | 29·555 | 8 a.m. | 29·360 | 2 & 3 p.m. | ... | ... | ... | ... | 13 | 3 | 5 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | 397 | 16·5 | 1·4 | 8·8 | W.N.W. | 1·54 p.m. |
| 27 | 29·704 | 29·905 | 8 a.m. | 29·525 | 10 a.m. | ... | ... | 1 | 7 | 13 | ... | 1 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | 362 | 15·1 | 1·1 | 7·2 | S.W. | 4·25 p.m. |
| 28 | 29 950 | 30·050 | 8 a.m. | 29·870 | 2 p.m. | 6 | ... | ... | 2 | 10 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 6 | 218 | 9·1 | 0·4 | 1·8 | S.S.E. | 2· 5 p.m. |
| 29 | 30·011 | 30·050 | 12 p.m. | 29·970 | 5 p.m. | 2 | ... | 1 | ... | 3 | ... | 10 | ... | ... | ... | 1 | ... | 5 | 1 | 1 | ... | 84 | 3·5 | 0·1 | 0·7 | E.S.E. | 5·30 p.m. |
| 30 | 29·885 | 30·015 | 9 a.m. | 29·790 | 12 p.m. | ... | ... | ... | ... | 2 | 1 | 2 | 1 | 6 | 6 | 6 | ... | ... | ... | ... | ... | 206 | 8·6 | 0·4 | 3·6 | N. | 7·33 a.m. |
| 31 | 29·779 | 29·935 | 8 a.m. | 29·635 | 3 p.m. | ... | ... | ... | ... | 5 | 13 | 2 | 2 | 2 | ... | ... | ... | ... | ... | ... | ... | 484 | 20·2 | 2·0 | 16·2 | W. | 5·20 p.m. |
| Sums or Means. | 29·883 | August 14th. 30·245 | 9 a.m. | August 26th. 29·360 | 2 & 3 p.m. | 37 | 69 | 53 | 66 | 240 | 99 | 50 | 15 | 18 | 22 | 24 | 7 | 17 | 8 | 3 | 16 | Sum 9116 | Mean. 12·3 | Mean. 1·0 | | | |

The self-registering Barometer is photographic, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour.

# ABSTRACT FROM METEOROLOGICAL STATIONS,

## For the Month of AUGUST, 1872.

| Stations. | Least Distance from East Coast in miles. | Height above sea in feet. | Mean of Observations taken at 9 a.m., August, 1872. | | | | | | | | | | For 24h, previous to 9 a.m. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Barometer. | Temperature in Shade. | Humidity 0 to 100. | Wind. | | Clouds, 0 to 10. | Temperature in Shade. | | | | Rain. | | | | Evaporation in inches. |
| | | | | | | Direction | Force. 0-6 | | Mean. Max. | Mean. Min. | Extreme Max. | Extreme Min. | Total Fall, inches. | No. of Days. | Greatest Fall, inches. | Date | |
| Tenterfield† | 80 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Grafton† | 22 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Bourke† | 393 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Narrabri | 196 | ... | ... | 52·7 | ... | N.W. | 1·2 | 2·9 | 66·7 | 38·7 | 71·9 | 30·5 | 1·030 | 6 | 0·470 | 31 | 3·015 |
| Armidale | 80 | 3278 | 30·244 | 41·6 | 87·0 | S.W. | 1·3 | 3·7 | 49·6 | 33·5 | 59·2 | 22·1 | 1·100 | 3 | 0·590 | 18 | 1·963 |
| Port Macquarie | 0 | ... | ... | 54·3 | ... | S.W. | 1·9 | 3·1 | 63·7 | 44·9 | 74·4 | 36·8 | 1·440 | 8 | 0·410 | 21 | 5·444 |
| Murrurundi | 94 | 1545 | ... | 46·4 | ... | W. | 0·9 | 5·3 | 55·5 | 37·2 | 69·2 | 28·3 | 2·275 | 8 | 0·955 | 10 | 3·915 |
| Cassilis | 120 | ... | ... | 45·6 | ... | N.W. | 0·2 | ... | 57·9 | 33·3 | 65·1 | 25·2 | 0·940 | 1 | 0·940 | 10 | ... |
| Muswellbrook | 68 | ... | ... | 48·0 | ... | N.W. | 1·4 | ... | 60·1 | 35·9 | 66·5 | 26·3 | 1·620 | 4 | 0·810 | 21 | 2·416 |
| Dubbo | 182 | ... | ... | 47·9 | ... | N.W. | 0·4 | ... | 56·3 | 39·4 | 61 9 | 29·9 | 1·150 | 4 | 0·500 | 17 | 2·289 |
| Mudgee | 121 | ... | ... | 44·7 | ... | W. | 0·6 | ... | 54·2 | 35·1 | 60·4 | 28·0 | 1·360 | 5 | 0·580 | 10 | ... |
| Dalwood | 27 | ... | ... | ... | ... | ..... | .. | ... | ... | ... | ... | ... | 2·700 | 8 | 1·250 | 20 | ... |
| West Maitland | 18 | ... | ... | 49·7 | ... | W. | 0·9 | 4·5 | 57·2 | 42·2 | 64·1 | 34·1 | 2·680 | 7 | 1·070 | 20 | 3·647 |
| Lambton | 7 | ... | ... | 47·6 | ... | W. | 1·3 | ... | 59·5 | 35·7 | 66·3 | 27·0 | 4·570 | 13 | 1·660 | 12 | 2·145 |
| Newcastle | 1 | 112 | 30·094 | 52·4 | 78·0 | W. | 0·4 | 4·9 | 60·5 | 44·3 | 68·3 | 37·3 | 6·740 | 12 | 2·110 | 12 | ... |
| Orange | 124 | 2891 | ... | 40·2 | ... | E. | 2·1 | ... | 48·1 | 32·3 | 54·8 | 25·2 | 1·810 | 5 | 0·760 | 28 | ... |
| Bathurst | 96 | 2333 | 30·137 | 43·3 | 76·0 | W. | 1·0 | 7·0 | 55·7 | 30·9 | 69·0 | 22·0 | 0·780 | 7 | 0·180 | 31 | ... |
| Kurrajong | 36 | 1870 | ... | 44·1 | ... | W.S.W. | ... | ... | 51·1 | 37·1 | 59·0 | 31·0 | 2·800 | 10 | 0·750 | 19 | ... |
| Mount Victoria | 61 | ... | 30·059 | 40·0 | 90·0 | W. | 0·1 | 5·7 | 48·9 | 31·1 | 54·9 | 21·7 | 0·630 | 3 | 0·280 | 29 | 1·458 |
| Woodford | 50 | 2192 | 30·035 | ... | ... | W. | 0·1 | ... | ... | 39·8 | ... | 34·4 | 1·370 | 9 | 0·350 | 29 | ... |
| Parramatta | 16 | ... | ... | ... | ... | N.W | 1·5 | 5·4 | ... | 34·4 | ... | 29·9 | 1·590 | 9 | 0·660 | 17 | ... |
| Sydney | 5 | 155 | 30·114 | 52·0 | 76·3 | W. | 1·0 | 5·7 | 59·5 | 44·3 | 69·1 | 36·8 | 2·972 | 16 | 0·927 | 17 | 2·234 |
| Liverpool | 16 | ... | 30·053 | 47·2 | ... | S. | 0·5 | 3·9 | 57·8 | 36·5 | 64·0 | 24·0 | 1 135 | 14 | 0·496 | 20 | ... |
| Wentworth | 476 | ... | ... | 50·6 | ... | S. | 1·9 | 2·9 | 61 0 | 40·1 | 67·8 | 33·5 | 0·680 | 6 | 0·200 | 31 | 3·157 |
| Wilton | 13 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 1·030 | 4 | 0·500 | 20 | ... |
| Cordeaux River | 10 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 0·950 | 5 | 0·720 | 20 | ... |
| Young | 140 | ... | ... | 44·3 | ... | S.W. | 0·9 | ... | 56·4 | 32·2 | 68 0 | 24·1 | 1·320 | 3 | 0·540 | 27 | 3·322 |
| Wollongong | 0 | ... | ... | 52·5 | ... | S.W. | 1·6 | ... | 59·3 | 45·7 | 67·4 | 40·2 | 0·780 | 3 | 0·490 | 17 | 2·920 |
| Moss Vale | 31 | ... | ... | 41·6 | ... | W. | 1·4 | ... | 48·4 | 34·7 | 53·4 | 27·8 | 1·930 | 7 | 0·540 | 17 | ... |
| Goulburn | 54 | 2129 | 30·123 | 41·6 | 87·0 | W. | 0·0 | 3·3 | 55·3 | 27·8 | 61·9 | 13·0 | 1·800 | 13 | 0·350 | 27 | 2·076 |
| Terrara | 4 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 1·240 | 8 | 0·500 | 20 | ... |
| Wagga Wagga | 161 | ... | ... | 44·4 | ... | W. | 0·5 | ... | 54·0 | 34·7 | 61·1 | 26·9 | 1·710 | 8 | 0·710 | 5 | 1·883 |
| Cape St. George | 0 | 170 | 30·034 | 50·8 | 71·0 | S. | 1·6 | 4·4 | 57·4 | 44·1 | 64·2 | 37·6 | 1·235 | 14 | 0·370 | 28 | ... |
| Queanbeyan | 60 | ... | ... | 36·7 | ... | W. | 0·4 | ... | 41·2 | 32·2 | 49 2 | 24·1 | 0·880 | 5 | 0·270 | 28 | 2·062 |
| Urana | 218 | ... | ... | 41·6 | ... | W. | ... | ... | 48·2 | 35·0 | 50·1 | 29·1 | 0 | 0 | 0 | ... | 1·001 |
| Deniliquin | 287 | 410 | 30·244 | 46·5 | 86·0 | N.W. | 1·0 | 2·7 | 58·8 | 34·2 | 67·6 | 27·2 | 1·020 | 9 | 0·230 | 31 | ... |
| Kiandra | 88 | 4640 | 30·122 | 31·2 | 68·0 | N.W. | 0·5 | 5·3 | 47·6 | 14·7 | 59·6 | * | 1·250 | 3 | 0·720 | 31 | ... |
| Cooma | 52 | 2637 | ... | 40·8 | ... | S. | 2·7 | 7·7 | 55·6 | 26·0 | 62·6 | 15·8 | 0·180 | 3 | 0·100 | 5 | 0·663 |
| Albury | 175 | 572 | ... | 45·8 | ... | W. | 0·4 | ... | 59·5 | 32·0 | 77·4 | 24·3 | 2·520 | 9 | 0·750 | 27 | ... |
| Eden | 0 | 107 | 30·021 | 50·3 | 78·0 | S.W. | 1·5 | 5·1 | 57·4 | 43·2 | 62·0 | 39·1 | 0·920 | 11 | 0·350 | 11 | ... |

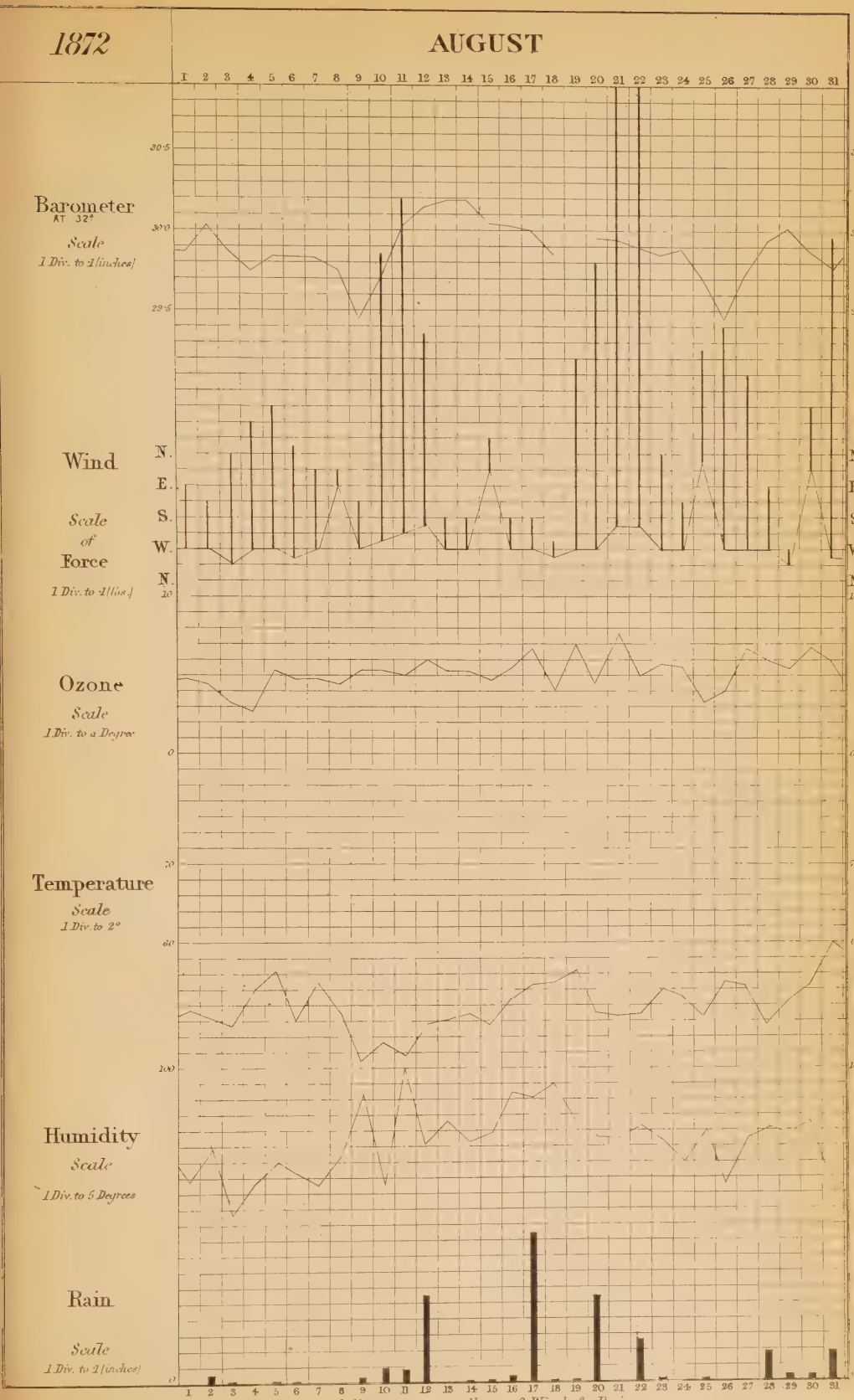
* 8° below zero. † Returns not received.

Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only twelve of the stations have barometers.

## REMARKS.

Narrabri—Very severe frost during month.
Armidale—Snowing, 10th; ice, 11th; foggy, 14th and 15th; and stormy, 26th and 27th.
Port Macquarie—Thunder squall, 11th; and squally, 12th, 20th, 21st, and 22nd.
Murrurundi—Fog, 16th; snow, 10th, 11th, and 20th.
Muswellbrook—Snowing, 20th.
Mudgee—Heavy frost, 3rd; dense fog, 19th.
Dalwood—Snow, 21st.
West Maitland—Sharp frost, 3rd; snow, 11th; and cold during month.
Lambton—Ice, half-inch thick, 2nd; thunder and sleet storm, 10th.
Newcastle—Stormy, 12th; heavy sea, 11th, 12th, 13th, 14th, 21st, and 22nd.
Orange—Heavy snow, 10th, 20th, and 27th; thunderstorm, 30th, and frost during month.
Bathurst—Heavy fall of snow, 10th; frosty during month.
Kurrajong—Snow, 20th; frost, 9th and 10th; boisterous, 11th, 22nd, and 31st, and thunderstorm, 30th.
Mount Victoria—Sleet, 5th and 26th; snow, 10th, 20th, and 27th; and foggy during month.
Parramatta—Thunderstorm, 30th.
Sydney—Frost, 3rd; thunderstorm, 16th, 30th, 31st; snow on Blue Mountains, 20th; gale, 21st, and hot wind, 26th.
Liverpool—Sharp frost, 3rd, 25th, and 26th; thunderstorms, 16th and 30th.
Wentworth—Sharp frost, 11th and 13th; stormy, 26th.
Wilton—Sleet, 17th and 18th.
Cordeaux River—Light fall of snow, 10th; hail, 19th; and frost and gales during month.
Young—Heavy thunderstorm, 30th.
Moss Vale—Snow, 10th and 20th; sleet, 27th; violent squall, 31st; fog, 18th.
Terrara—Little snow fell, 10th; S. squall, 11th.
Wagga Wagga—Heavy fog, 17th; and hot wind, 30th.
Cape St. George—Heavy sea, 23rd; thunderstorms, 24th and 28th, and S. gales during month.
Queanbeyan—Snow storm, 10th; frosty and cold during month.
Urana—Frosty, 14th and 17th; sultry, 29th.
Deniliquin—High N. wind, 2nd; frosty and cold during month.
Kiandra—4ft. 2½ inches snow fell during month; and thunderstorm, 29th.
Cooma—Snow, 11th and 12th; stormy, 22nd; and frosty and foggy during month.
Albury—Frosty during month.
Eden—Thunderstorm, 31st; snow on Mount Imlay, 10th; and squalls during month.

# METEOROLOGICAL CURVES




*The dark vertical lines represent Force of Wind & Rain.*

Lithographed at the Surveyor Gen.ral's Office Sydney. Sept.r 1872.

*Force of Wind 21st 4·8 and 22nd 5·0 lbs.* ——— *Heavy Dew on 3rd 14th 15th 18th 19th 24th and 25th*

# METEOROLOGICAL OBSERVATIONS

MADE AT THE

# GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

# ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

# MONTH OF SEPTEMBER, 1872;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1872.

[Price, 6d.] 3a 41—72

# METEOROLOGICAL OBSERVATIONS.

## GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s

Magnetic Variation 9° 34′ 13″ East.

### SEPTEMBER, 1872.

### GENERAL ABSTRACT.

| | | | |
|---|---|---|---|
| **BAROMETER** .. At 32° Fah. | Highest Reading ... ... | 30·374 | ... On the 8th, at 9 a.m. |
| | Lowest Reading ... ... | 29·510 | ... On the 21st, at 4 p.m. |
| | Mean Height ... ... | 30·017 | |

(Being 0·117 in. greater than that in the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **WIND** .. .. | Greatest Pressure... ... | 16·2 lbs. | ... On the 28th. |
| | Mean Pressure ... ... | 0·6 lb. | |
| | Number of Days Calm ... | 0 | |
| | Prevailing Direction ... | W. | |

(Prevailing direction during the same month for the preceding 13 years W.)

| | | | |
|---|---|---|---|
| **TEMPERATURE** | Highest in the Shade ... | 79·6 | ... On the 12th. |
| | Lowest in the Shade ... | 42·4 | ... On the 8th. |
| | Greatest Range ... ... | 29·6 | ... On the 11th. |
| | Highest in the Sun ... | 116·1 | ... On the 12th. |
| | Highest in a Black Box with Glass Top ... ... | 200·7 | ... On the 12th. |
| | Lowest on the Grass ... | 33·4 | ... On the 30th. |
| | Mean Diurnal Range ... | 16·4 | |
| | Mean in the Shade ... | 58·0 | |

(Being 0·6 less than that of the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **HUMIDITY** .. | Greatest Amount... ... | 100·0 | ... On the 13th. |
| | Least ... ... ... | 49·0 | ... On the 5th. |
| | Mean ... ... ... | 75·6 | |

(Being 7·2 greater than that of the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **RAIN** .. .. | Greatest Fall ... ... | 0·894 inch. | On the 24th. |
| | Number of Days ... ... | 12 rain and 7 dew. | |
| | Total Fall ... ... | 1·461 inch. | 65 ft. above the ground. |
| | | 2·282 inches. | 15 inches above the ground. |

(Being 0·038 inch less than that of the same month on an average of the preceding 13 years.)

| | | |
|---|---|---|
| **EVAPORATION** | Total Amount ... ... | 2·990 inches. |
| **OZONE** .. .. | Mean Amount ... ... | 6·2 |

(Being 1·4 greater than that in the same month on an average of the preceding 11 years.)

| | | |
|---|---|---|
| **ELECTRICITY** .. | Number of Days Lightning | 2 |
| **CLOUDY SKY** .. | Mean Amount ... ... | 5·4 |
| | Number of Clear Days ... | 7 |
| **METEORS** .. | Number Observed ... | 0 |

### REMARKS.

During the early part of the month the air was remarkably clear and dry, and charged with positive electricity. Very little rain fell until the 13th. Generally over the Colony the rainfall has been moderate, and at Sydney about the average for the month. Seventeen thunderstorms were recorded, and on the morning of the 11th the wind was hot in Sydney. Snow fell at Cooma on the 14th, and during the month 4 inches of snow fell at Kiandra. At Sydney lunar halos were seen on the 14th and 16th. The mean temperature was 0·6 below the average, and some nights were remarkably cold for the season.

NOTE.—The Electrometer used is deflected to 90 degrees by electricity sufficient to make the smallest visible spark.

## SYDNEY, SEPTEMBER, 1872.

| Date. | Moon's Phases. | Standard Barometer at 9 a.m., corrected to Mean Sea Level. | Wind. | | Temperature. | | | | | | | | | Humidity. 0-100. | Rain. Inches. | Cl'dy Sky. 0-10. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Dry. | Wet. | Shade. | | | | Sun. | Grass. | Sea Water. 9 a.m. | | | |
| | | | Prevailing Direction. | Total Velocity. Miles. | Mean 9.3.9. | Mean 9.3.9. | Max. | Min. | Range | Mean. | Max. | Min. | | Mean 9.3.9. | | Taken at 9, & 9. |
| 1 | | 30·117 | W. | 257 | 55·6 | 49·8 | 67·4 | 48·3 | 19·1 | 57·9 | 104·7 | 41·4 | 55·7 | 65·0 | 0·004 | 0·0 |
| 2 | | ·255 | W.N.W. | 167 | 55·7 | 52·0 | 61·8 | 47·4 | 14·4 | 54·6 | 102·6 | 39·8 | 56·1 | 77·3 | ·0 | 0·0 |
| 3 | New | ·313 | N.E. | 228 | 58·0 | 55·1 | 63·1 | 46·6 | 16·5 | 54·9 | 102·7 | 40·0 | 56·3 | 81·7 | 0·002 | 0·0 |
| 4 | | ·185 | N.N.E. | 146 | 56·9 | 54·5 | 61·6 | 47·0 | 14·6 | 54·3 | 89·0 | 44·0 | 56·7 | 84·7 | 0·003 | 10·0 |
| 5 | In Equat. | ·080 | W. | 190 | 62·4 | 55·5 | 72·1 | 53·2 | 18·9 | 62·7 | 106·3 | 48·3 | 56·9 | 64·3 | ·0 | 6·7 |
| 6 | | ·152 | S. | 392 | 59·6 | 52·7 | 68·7 | 50·9 | 17·8 | 59·8 | 105·7 | 42·1 | 57·1 | 62·3 | ·0 | 6·7 |
| 7 | | ·509 | W. | 152 | 54·4 | 49·8 | 59·1 | 51·0 | 8·1 | 55·1 | 97·5 | 46·4 | 57·3 | 71·7 | ·0 | 3·3 |
| 8 | | ·519 | N.N.W. | 217 | 51·2 | 49·2 | 64·0 | 42·4 | 21·6 | 53·2 | 104·0 | 36·3 | 57·7 | 86·0 | 0·001 | 0·0 |
| 9 | | ·494 | N.N.E. | 149 | 58·3 | 54·9 | 65·5 | 43·5 | 22·0 | 54·5 | 104·8 | 38·7 | 57·9 | 78·7 | 0·004 | 0·0 |
| 10 | | ·457 | N.N.E. | 225 | 62·0 | 56·8 | 69·8 | 46·0 | 23·8 | 57·9 | 105·9 | 38·6 | 57·7 | 70·7 | 0·002 | 0·0 |
| 11 | First Qr. | ·313 | N.N.W. | 380 | 65·8 | 58·7 | 79·1 | 49·5 | 29·6 | 64·3 | 115·1 | 41·9 | 58·1 | 63·3 | ·0 | 0·0 |
| 12 | G. S. Dec. | ·200 | S. | 428 | 66·3 | 58·9 | 79·6 | 57·8 | 21·8 | 68·7 | 116·1 | 48·1 | 58·4 | 64·3 | ·0 | 5·0 |
| 13 | | ·398 | S.S.W. | 374 | 53·7 | 53·3 | 54·9 | 52·3 | 2·6 | 53·6 | 62·1 | 49·2 | 58·1 | 97·3 | 0·069 | 10·0 |
| 14 | | ·272 | W. | 225 | 54·0 | 52·3 | 57·3 | 49·7 | 7·6 | 53·5 | 82·9 | 46·3 | 58·3 | 88·3 | 0·540 | 9·7 |
| 15 | Perigee | ·262 | S.S.E. | 133 | 55·0 | 52·6 | 63·2 | 50·9 | 12·3 | 57·1 | 104·5 | 45·7 | 58·4 | 84·0 | 0·001 | 10·0 |
| 16 | | ·249 | W. | 170 | 58·0 | 54·3 | 65·1 | 50·1 | 15·0 | 57·6 | 112·1 | 44·8 | 58·7 | 77·7 | ·0 | 7·3 |
| 17 | Full | ·305 | N.N.E. | 194 | 58·4 | 55·1 | 62·9 | 49·1 | 13·8 | 56·0 | 103·0 | 43·1 | 59·1 | 79·3 | ·0 | 0·3 |
| 18 | In Equat. | ·218 | N.N.E. | 150 | 60·7 | 58·3 | 68·4 | 47·8 | 20·6 | 58·1 | 109·1 | 44·1 | 59·0 | 85·3 | 0·003 | 0·3 |
| 19 | | ·127 | N.E. | 233 | 63·9 | 60·6 | 69·3 | 52·2 | 17·1 | 60·8 | 107·9 | 46·2 | 59·3 | 80·7 | 0·003 | 7·0 |
| 20 | | 29·951 | S. | 330 | 62·5 | 59·9 | 73·9 | 59·0 | 14·9 | 66·5 | 108·1 | 52·5 | 59·7 | 84·3 | ·0 | 10·0 |
| 21 | | ·918 | W. | 407 | 64·1 | 57·9 | 71·0 | 56·0 | 15·0 | 63·5 | 103·9 | 54·1 | 60·1 | 67·0 | 0·005 | 8·0 |
| 22 | | 30·102 | W.S.W. | 189 | 56·8 | 47·5 | 64·1 | 50·9 | 13·2 | 57·5 | 96·0 | 46·1 | 60·0 | 51·0 | ·0 | 10·0 |
| 23 | | ·208 | S.S.E. | 377 | 55·2 | 53·6 | 61·9 | 49·0 | 12·9 | 55·5 | 94·3 | 43·4 | 59·7 | 89·0 | 0·044 | 10·0 |
| 24 | Last Qr. | ·171 | S. | 361 | 56·8 | 51·2 | 61·6 | 51·9 | 9·7 | 56·8 | 84·1 | 47·2 | 60·1 | 68·7 | 0·894 | 9·0 |
| 25 | G. N. Dec. | ·167 | S. | 302 | 56·5 | 53·3 | 65·2 | 48·8 | 16·4 | 57·0 | 101·6 | 46·5 | 60·0 | 80·7 | 0·544 | 7·0 |
| 26 | | ·127 | S. | 331 | 60·1 | 53·1 | 67·8 | 47·1 | 20·7 | 57·5 | 102·2 | 42·6 | 60·3 | 62·0 | ·0 | 5·7 |
| 27 | Apogee | ·287 | S.S.E. | 197 | 55·5 | 50·4 | 62·1 | 52·6 | 9·5 | 57·4 | 90·8 | 46·1 | 60·1 | 71·0 | 0·055 | 6·7 |
| 28 | | ·246 | N.N.E. | 293 | 58·9 | 54·7 | 65·4 | 43·9 | 21·5 | 54·6 | 104·0 | 34·9 | 60·3 | 74·7 | 0·002 | 6·3 |
| 29 | | 29·851 | W.N.W. | 271 | 61·4 | 58·5 | ... | 54·7 | ... | ... | 97·1 | 47·2 | 60·1 | 82·0 | 0·036 | 10·0 |
| 30 | | ·797 | W.S.W. | 244 | 59·6 | 55·1 | 72·2 | 47·5 | 24·7 | 59·9 | 109·0 | 33·4 | 60·3 | 74·7 | 0·070 | 4·0 |
| Means | ..... | 30·208 | W. | 7712 | 58·6 | 54·3 | 66·1 | 49·9 | 16·4 | 58·0 | 100·9 | 44·0 | 58·6 | 75·6 | Sum. 2·282 | 5·7 |

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.

Direction, velocity and pressure of the wind, deduced from 24 hourly records of Robinson's Anemometer.

The Barometer at 9 a.m. reads 0·042 above the true mean for the day.

## SYDNEY, SEPTEMBER, 1872.

| Date. | Evaporation. Inches. | Ozone, 0-10. Day. | Night. | Mean. | Remarks. |
|---|---|---|---|---|---|
| 1 | 0·110 | ... | ... | 3·5 | Fine and warm. Atmosphere very clear and dry. Electricity plus ; 0 to 90. |
| 2 | 0·082 | 4·0 | 5·5 | 4·8 | Fine and warm. Fresh breeze all afternoon. Evening hazy to W., and light dew falling. Electricity plus ; 0 to 20. |
| 3 | 0·085 | 8·0 | 7·0 | 7·5 | Fresh breeze, and smoky-looking. No clouds during the day. Hazy to W. in evening, and dew falling. |
| 4 | 0·006 | 6·0 | 7·0 | 6·5 | Cloudy. Very dull and foggy-looking. Dropping rain at intervals. |
| 5 | 0·122 | 4·0 | 5·0 | 4·5 | Fine after 5 p.m. Light clouds during day. Atmosphere very dry. Electricity plus ; 0 to 90. |
| 6 | 0·166 | 6·5 | 7·0 | 6·8 | Fine until 1 p.m. Atmosphere very dry. Evening dull, like rain. Fresh breeze during day. Electricity plus ; 0 to 90. |
| 7 | 0·060 | 5·0 | 7·5 | 6·3 | Cloudy. Dull until after 2 p.m., when clouds cleared. No clouds at 9 p.m., and light dew falling. |
| 8 | 0·107 | ... | ... | 4·0 | Fine day and warm. Morning smoky looking. Dew fell in the night. |
| 9 | 0·096 | 4·5 | 5·5 | 5·0 | Fine. Warm and smoky-looking. Foggy at daylight. No clouds at 9 p.m. |
| 10 | 0·126 | 5·0 | 7·0 | 6·0 | Fine. Warm and smoky-looking. Atmosphere dry and clear. No clouds during day. |
| 11 | 0·220 | 4·5 | 6·5 | 5·5 | Fine. Smoky looking. No clouds during day. Atmosphere very dry. Humidity at noon, 41. Hot wind until 1·50 p.m. Electricity plus ; 0 to 90. |
| 12 | 0·227 | 6·5 | 10·0 | 8·3 | Forenoon fine and very warm. Afternoon and evening cloudy and fine alternately. S. gale at 5·30 p.m. Very light rain, 9·50 p.m. Electricity plus ; 0 to 90. |
| 13 | ... | 9·0 | 10·0 | 9·5 | Cloudy. Very light rain at intervals during the day. |
| 14 | 0·037 | 7·5 | 6·5 | 7·0 | Cloudy and very dull. Dropping rain, 9·30 a.m. Fine between 7 p.m. and 7·35 p.m. Lunar halo, 9·13 p.m. |
| 15 | 0·080 | ... | ... | 4·0 | Fine from 1 p.m. until about 7 p.m. Clouds broken during forenoon. |
| 16 | 0·088 | 5·0 | 8·0 | 6·5 | Fine morning until 9·30 a.m., and again from after 4 p.m. until about 8 p.m. Lunar halos at 8·3 p.m. and 9 12 p.m. Dew falling in evening. Electricity plus ; 0 to 42. |
| 17 | 0·113 | 6·0 | 8·0 | 7·0 | Fine. Atmosphere dry. Light dew falling in the evening. |
| 18 | 0·120 | 6·5 | 6·5 | 6·5 | Morning cloudy until about 8 a.m. Dense fog from daylight until 7·30 a.m. Warm day. Dew falling in evening. |
| 19 | 0·114 | 5·5 | 7·0 | 6·3 | Warm. Cloudy and fine alternately during day. Fresh breeze. |
| 20 | 0·111 | 6·5 | 10·0 | 8·3 | Cloudy. Fine from 11 a.m. until 12·30 p.m. S. gale 2·30 p.m. Afternoon and evening dull, like rain. |
| 21 | 0·164 | 6·5 | 6·5 | 6·5 | Cloudy, dull, and strong breeze. Thunder-clouds after 4 p.m. ; clouds passed over to coast. |
| 22 | 0·066 | ... | ... | 4·0 | Cloudy. Evening very dull, like rain. Electricity plus ; 0 to 50. |
| 23 | ... | ... | 10·0 | ... | Cloudy. Light rain from 8 a.m. until 9·15 a.m. Dropping rain 1·7 p.m. Steady rain all afternoon and evening from 1·55 p.m. |
| 24 | ... | 5·0 | 9·5 | 7·3 | Fine from 8 p.m. until 8·30 p.m. Raining at intervals during day. |
| 25 | 0·082 | 7·0 | 8·0 | 5·7 | Heavy rain in the morning until about 9·30 a.m. Strong breeze. Fine after 8 p.m. Evening cold. |
| 26 | 0·169 | 5·0 | 7·5 | 6·3 | Forenoon cloudy and fine alternately. Cloudy again after 7·30 p.m. Drops of rain at 9·12 p.m. |
| 27 | 0·114 | 5·0 | 8·5 | 6·8 | Showers at 1 a.m. and 2·30 a.m. Fine after 7 p.m. Evening hazy, and dew falling. |
| 28 | 0·094 | 5·0 | 8·0 | 6·5 | Morning fine until 9·15 a.m., and again from 7 p.m. until 8 p.m. Strong breeze during day. |
| 29 | 0·090 | ... | ... | 3·3 | Light rain at intervals. Storm of wind and rain at 3·22 p.m. Fine after 6 p.m. Lightning E. all evening. Electricity plus ; 0 to 60. |
| 30 | 0·141 | 5·5 | 9·0 | 7·3 | Cloudy from 11 a.m. until after 2 p.m., and again after 4 p.m. Light rain at 5·55 p.m., and raining heavily at 9 p.m. Lightning E., S.W., N.E., and N., during evening. Electricity plus ; 0 to 90. |
| Means | Sum. 2·990* | 5·8 | 7·6 | 6·2 | |

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.
Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.
Dew fell 3rd, 8th, 9th, 10th, 18th, 19th, and 28th.
* Total for 27 days.

| Date. | Self-registering Barometer at 32°. | | | | | Self-registering Anemometer. | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mean. | Max. | Hour. | Min. | Hour. | S. | S.S.W. | S.W. | W.S.W. | W. | W.N.W. | N.W. | N.N.W. | N. | N.N.E. | N.E. | E.N.E. | E. | E.S.E. | S.E. | S.S.E. | Velocity. Total. Miles. | Velocity. Mean. pr. hr. | Mean Pressure. lbs. | Greatest Pressure. Direction of Wind. Time. | | |
| 1 | 29·986 | 30·065 | 8 a.m. | 29·900 | 1, 2, & 3 p.m. | ... | ... | ... | 7 | 12 | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 257 | 10·7 | 0·6 | 3·4 | W. | 10· 2 a.m. |
| 2 | 30·051 | 30·130 | 8 a.m. | 29·990 | 2, 3, & 4 p.m. | ... | ... | ... | ... | 3 | 6 | 1 | ... | 2 | 1 | 5 | 5 | 1 | ... | ... | ... | 167 | 7·0 | 0·2 | 1·6 | E.N.E. | 3·44 p.m. |
| 3 | 30·040 | 30·140 | 10 a.m. | 30·000 | 3, 4, & 5 a.m. | ... | ... | ... | ... | 4 | 5 | ... | 3 | 2 | 3 | 7 | ... | ... | ... | ... | ... | 228 | 9·5 | 0·5 | 3·6 | N.N.E. | 6·37 p.m. |
| 4 | 29·890 | 30·025 | 9 a.m. | 29·805 | 3 a.m. | ... | ... | ... | 1 | 5 | 2 | 1 | 5 | 3 | 5 | 2 | ... | ... | ... | ... | ... | 146 | 6·1 | 0·2 | 1·4 | N.N.E. | 7· 2 p.m. |
| 5 | 29·968 | 30·029 | 8 a.m. | 29·916 | 3 p.m. | ... | ... | 1 | 3 | 5 | 3 | 3 | ... | ... | 2 | 2 | 5 | ... | ... | ... | ... | 190 | 7·9 | 0·3 | 3·1 | W.S.W. | 9·23 a.m. |
| 6 | 30·175 | 30·365 | 8 a.m. | 30·000 | 2 p.m. | 11 | 1 | 3 | ... | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 6 | 322 | 16·3 | 1·3 | 5·8 | W. | 10·45 a.m, |
| 7 | 30·297 | 30·340 | 9 & 8 a.m. | 30·250 | 3 p.m. | 3 | 2 | ... | 1 | 6 | 3 | ... | ... | ... | 1 | ... | 3 | 2 | 2 | ... | 1 | 152 | 6·3 | 0·2 | 1·3 | S. | 9·48 a.m. |
| 8 | 30·314 | 30·374 | 9 a.m. | 30·260 | 5 p.m. | ... | ... | ... | 2 | ... | ... | 2 | 9 | 1 | 5 | 5 | ... | ... | ... | ... | ... | 217 | 9·0 | 0·4 | 4·2 | N.N.E. | 5·55 p.m. |
| 9 | 30·294 | 30·354 | 10 a.m. | 30·260 | 4 p.m. | ... | ... | ... | ... | 1 | 2 | ... | ... | 2 | 8 | 6 | 4 | 1 | ... | ... | ... | 149 | 6·2 | 0·2 | 1·3 | N.E. | 4·50 p.m. |
| 10 | 30·216 | 30·350 | 9 a.m. | 30·160 | 4 a.m. | ... | ... | ... | ... | ... | 1 | 1 | ... | 5 | 6 | 5 | 4 | 1 | 1 | ... | ... | 225 | 9·4 | 0·4 | 4·5 | N.N.E. | 5·50 p.m. |
| 11 | 30·054 | 30·180 | 9 a.m. | 29·990 | 4 & 5 p.m. | ... | ... | ... | ... | ... | 2 | 2 | 7 | 3 | 6 | 4 | ... | ... | ... | ... | ... | 380 | 15·8 | 1·3 | 8·0 | N.E. | 3·55 p.m. |
| 12 | 30·113 | 30·245 | 8 a.m. | 29·974 | 3 p.m. | 9 | 6 | ... | ... | ... | 4 | ... | ... | ... | ... | 1 | 4 | ... | ... | ... | ... | 428 | 17·8 | 1·6 | 8·8 | S. | 8 p.m. |
| 13 | 30·128 | 30·220 | 9 a.m. | 30·045 | 3 & 4 a.m. | 4 | 13 | 1 | 3 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 374 | 15·6 | 1·2 | 2·9 | S. | 3 p.m. |
| 14 | 30·067 | 30·100 | 9 & 10 a.m. & 9 p.m. | 30·030 | 3 p.m. | ... | 4 | 1 | 4 | 15 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 225 | 9·4 | 0·4 | 1·1 | S.S.W. | 5·45 p.m. |
| 15 | 30·073 | 30·127 | 10 a.m. | 30·020 | 4 p.m. | 3 | 1 | ... | 4 | 4 | 4 | ... | ... | ... | 1 | ... | ... | ... | 2 | 1 | 4 | 133 | 5·5 | 0·2 | 1·3 | S.S.E. | 4·30 p.m. |
| 16 | 30·106 | 30·170 | 8 a.m. | 30·049 | 4 p.m. | 4 | 1 | ... | 1 | 8 | 5 | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 4 | 170 | 7·1 | 0·3 | 0·8 | S. | 2·40 p.m. |
| 17 | 30·043 | 30·130 | 9 a.m. | 30·000 | 3 a.m. | ... | ... | ... | 1 | 1 | 2 | ... | ... | 4 | 6 | 4 | 4 | 2 | ... | ... | ... | 194 | 8·1 | 0·3 | 2·4 | E.N.E. | 3·20 p.m. |
| 18 | 29·990 | 30·050 | 9 a.m. | 29·950 | 3, 4, & 5 p.m. | ... | ... | ... | ... | 1 | 4 | ... | ... | 1 | 8 | 2 | 6 | 2 | ... | ... | ... | 150 | 6·3 | 0·2 | 1·4 | E.N.E. | 2·28 p.m. |
| 19 | 29·863 | 29·990 | 9 a.m. | 29·805 | 3 a.m. | ... | ... | ... | ... | ... | 2 | ... | 1 | ... | 5 | 10 | 2 | 2 | 2 | ... | ... | 233 | 9·7 | 0·5 | 2·9 | N.E. | 5 p.m. |
| 20 | 29·821 | 29·882 | 10 p.m. | 29·750 | 1 p.m. | 7 | 3 | 6 | ... | 2 | 1 | ... | ... | ... | ... | ... | ... | 4 | 1 | ... | ... | 330 | 13·8 | 0·9 | 7·2 | S. | 5·16 p.m. |
| 21 | 29·728 | 29·900 | 8 a.m. | 29·510 | 4 p.m. | 1 | ... | 4 | 2 | 8 | 1 | 1 | ... | 1 | ... | 3 | 3 | ... | ... | ... | ... | 407 | 17·0 | 1·4 | 7·2 | N.E. | 4·28 p.m. |
| 22 | 29·970 | 30·038 | 8 a.m. | 29·905 | 2 p.m. | 5 | ... | 5 | 7 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 5 | 189 | 7·9 | 0·3 | 2·4 | S. | 8·58 a.m. |
| 23 | 30·004 | 30·044 | 9 a.m. | 29·972 | 3 a.m. | 10 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 13 | 377 | 15·7 | 1·2 | 6·1 | S.S.W. | 9·56 a.m. |
| 24 | 29·986 | 30·020 | 9 a.m. | 29·950 | 3 a.m. | 9 | 4 | 8 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 361 | 15·0 | 1·1 | 2·9 | S.S.E. | 11·47 a.m. |
| 25 | 29·988 | 30·035 | 9 p.m. | 29·950 | 4 a.m. | 8 | 4 | 1 | ... | 8 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 302 | 12·6 | 0·8 | 3·4 | S.S.E. | 11·50 a.m. |
| 26 | 29·997 | 30·105 | 8 a.m. | 29·910 | 3 p.m. | 8 | 7 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 6 | 331 | 13·8 | 1·0 | 2·2 | S. | 4·28 a.m. |
| 27 | 30·093 | 30·135 | 9 & 10 a.m. | 30·042 | 4 a.m. | 4 | 4 | 1 | ... | 4 | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 6 | 197 | 8·2 | 0·3 | 2·0 | S. | 9·48 a.m. |
| 28 | 29·897 | 30·093 | 9 a.m. | 29·730 | 8 a.m. | ... | ... | ... | 1 | 1 | ... | 4 | 7 | ... | 9 | 2 | ... | ... | ... | ... | ... | 293 | 12·2 | 0·7 | 7·6 | N.N.E. | 4·17 p.m. |
| 29 | 29·612 | 29·695 | 9 a.m. | 29·530 | 3 p.m. | ... | ... | 1 | 3 | 4 | 9 | 3 | 1 | 3 | ... | ... | ... | ... | ... | ... | ... | 271 | 11·3 | 0·6 | 16·2 | S.W. | 3·27 p.m. |
| 30 | 29·740 | 29·877 | 8 a.m. | 29·630 | 3 p.m. | 5 | ... | 1 | 7 | 4 | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 3 | 2 | 244 | 10·2 | 0·5 | 2·0 | S. | 10·20 p.m. |
| Sums or Means. | 30·017 | Sept. 8th. 30·374 | 9 a.m. | Sept. 21st. 29·510 | 4 p.m. | 91 | 51 | 36 | 48 | 103 | 67 | 18 | 33 | 27 | 66 | 58 | 40 | 15 | 10 | 6 | 51 | Sum 7712 | Mean. 10·7 | Mean. 0·6 | | | |

The self-registering Barometer is photographic, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour.

# ABSTRACT FROM METEOROLOGICAL STATIONS,

## For the Month of SEPTEMBER, 1872.

| Stations. | Least Distance from East Coast in miles. | Height above sea in feet. | Mean of Observations taken at 9 a.m., September, 1872. | | | | | | | | | | For 24h, previous to 9 a.m. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Barometer. | Temperature in Shade. | Humidity (0 to 100). | Wind. | | Clouds 0-10. | Temperature in Shade. | | | | Rain. | | | | Evaporation in inches. |
| | | | | | | Direction | Force 0-6 | | Mean. Max. | Mean. Min. | Extreme Max. | Extreme Min. | Total Fall, inches. | No. of Days | Greatest Fall, inches. | Date | |
| Tenterfield ... | 80 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Grafton ..... | 22 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Bourke ..... | 393 | ... | ... | 63·0 | ... | N.E. | 0·0 | 2·0 | 72·1 | 53·8 | 74·4 | 45·4 | ... | ... | ... | ... | ... |
| Narrabri ..... | 196 | ... | ... | 61·8 | ... | N.W. | 1·2 | 2·9 | 73·8 | 49·7 | 87·9 | 36·5 | 2·510 | 6 | 1·070 | 25 | 4·072 |
| Armidale..... | 80 | 3278 | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Port Macquarie | 0 | ... | ... | 59·5 | ... | W.S.W. | 1·6 | 3·9 | 67·4 | 51·5 | 73·0 | 43·1 | 6·840 | 13 | 2·970 | 25 | 6·831 |
| Murrurundi ... | 94 | 1545 | ... | 55·5 | ... | W. | 0·7 | 4·4 | 65·4 | 45·6 | 78·3 | 35·3 | 3·070 | 6 | 1·230 | 30 | 4·580 |
| Cassilis ..... | 120 | ... | ... | 55·1 | ... | N. | 0·1 | ... | 68·0 | 42·2 | 84·1 | 32·2 | 1·950 | 4 | 0·870 | 30 | ... |
| Muswellbrook.. | 68 | 475 | ... | 57 5 | ... | S.E. | 1·7 | ... | 69·2 | 45·7 | 87·5 | 34·3 | 1·810 | 4 | 0·660 | 25 | 3·625 |
| Dubbo ..... | 182 | ... | ... | 57·4 | ... | E.N.E. | 0·6 | ... | 68·9 | 45·9 | 79·9 | 37·9 | 1·050 | 3 | 0·440 | 5 | 2·845 |
| Mudgee ..... | 121 | ... | ... | 53·4 | ... | W. | 0·4 | ... | 63·7 | 43·1 | 78·4 | 33·0 | 1·730 | 3 | 0·800 | 30 | ... |
| Dalwood ..... | 27 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 1·640 | 5 | 0·950 | 24 | ... |
| West Maitland | 18 | ... | ... | 57·9 | ... | W. | 1·1 | 4·9 | 66·6 | 49·1 | 82·2 | 39·2 | 1·300 | 7 | 0·730 | 25 | 3·397 |
| Lambton ..... | 7 | ... | ... | 55·4 | ... | S.W. | 1·1 | ... | 68·5 | 42·3 | 82·3 | 32·0 | 1·600 | 10 | 0·440 | 24 | 2·705 |
| Newcastle ..... | 1 | 112 | 30·182 | 58·8 | 75·0 | N.W | 0·3 | 3·9 | 66·8 | 50·7 | 81·3 | 41·1 | 1·410 | 10 | 0·450 | 14 | ... |
| Orange..... | 124 | 2891 | ... | 49·7 | ... | S. | 1·4 | ... | 59·1 | 40·3 | 72·6 | 32·1 | 2·870 | 8 | 0·760 | 29 | 5·010 |
| Bathurst ..... | 96 | 2200 | 30·195 | 51·7 | 74·0 | E. | 0·7 | 5·2 | 66·4 | 37·0 | 78·5 | 28·0 | 1·130 | 4 | 0·360 | 30 | ... |
| Kurrajong ..... | 36 | 1870 | ... | 51·4 | ... | W. | ... | ... | 60·1 | 42·7 | 78·0 | 36·0 | 2·250 | 11 | 0·750 | 23 | ... |
| Mount Victoria | 61 | 3490 | 30·150 | 49·2 | 80·0 | W. | 0·1 | 5·4 | 58·9 | 39·4 | 75·1 | 31·9 | 1·380 | 7 | 0·500 | * | 2·243 |
| Woodford ..... | 50 | 2192 | 30·114 | 50·0 | ... | W.S.W. | 0·0 | ... | ... | 46·7 | ... | 40·4 | 2·250 | 11 | 0·840 | 24 | ... |
| Parramatta..... | 16 | ... | ... | 58·1 | ... | W. | 1·6 | 4·2 | 71·4 | 44·7 | 86·9 | 35·1 | 1·120 | 9 | 0·450 | 14 | ... |
| Sydney..... | 5 | 155 | 30·208 | 58·0 | 75·6 | W. | 0·6 | 5·4 | 66·1 | 49·9 | 79·6 | 42·4 | 2·282 | 12 | 0·894 | 24 | 2·990 |
| Liverpool..... | 16 | ... | 30·162 | 55·3 | ... | W. | 0·7 | 4·3 | 67·0 | 43·6 | 81·0 | 33·0 | 0·685 | 13 | 0·290 | 14 | ... |
| Wentworth..... | 476 | ... | ... | 58·1 | ... | N.E. | 1·7 | 2·7 | 69·6 | 46·6 | 86·5 | 38·3 | 1·220 | 7 | 0·410 | 21 | 4·230 |
| Wilton ..... | 13 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 0·710 | 5 | 0·380 | 14 | ... |
| Cordeaux River | 6 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 1·820 | 7 | 0·630 | 14 | ... |
| Young ..... | 140 | ... | ... | 52·7 | ... | W. | 1·0 | ... | 66·2 | 39·1 | 80·0 | 24·1 | 4·750 | 7 | 1·910 | 14 | 5·026 |
| Wollongong ... | 0 | ... | ... | 56·0 | ... | S.W. | 1·7 | ... | 64·5 | 47·5 | 74·4 | 39·7 | 2·020 | 6 | 0·500 | 13 | 2·883 |
| Moss Vale ..... | 31 | ... | ... | 50·3 | ... | W. | 1·3 | ... | 59·4 | 41·2 | 73·4 | 31·8 | 2·230 | 8 | 0·840 | 13 | ... |
| Goulburn..... | 54 | 2129 | 30·224 | 51·0 | 80·0 | N.W. | 0·1 | 4·1 | 66·8 | 35·1 | 77·1 | 26·8 | 3·196 | 6 | 1·280 | 14 | 3·222 |
| Terrara..... | 4 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 1·720 | 7 | 0·910 | 14 | ... |
| Wagga Wagga | 161 | ... | ... | 53·4 | ... | W. | 0·7 | ... | 63·6 | 43·2 | 76·1 | 37·9 | 2·090 | 9 | 0·740 | 21 | 2·477 |
| Cape St. George | 0 | 170 | 30·123 | 56·5 | 73·0 | N.E. | 1·4 | 4·3 | 63·4 | 49·6 | 73·2 | 43·6 | 2·155 | 12 | 0·660 | 14 | ... |
| Queanbeyan ... | 60 | ... | ... | 45 6 | ... | S.S.E. | 0·2 | ... | 51·2 | 39·9 | 61·2 | 32 1 | 2·760 | 6 | 1·010 | 14 | 3·476 |
| Urana ..... | 218 | ... | ... | ... | ... | S.W. | 0·9 | 4·2 | ... | 43·6 | ... | 39·1 | 1·570 | 5 | 0·610 | 29 | 1·087 |
| Deniliquin ..... | 287 | 410 | 30·315 | 55·2 | 78·0 | S.W. | 1·4 | 2·7 | 70·7 | 39·7 | 83·6 | 30·2 | 1·670 | 3 | 0·820 | 20 | ... |
| Kiandra ..... | 88 | 4640 | 30·181 | 38·9 | 75·0 | N.W. | 0·5 | 4·7 | 52·3 | 25·4 | 64·9 | 9·3 | 5·040 | 11 | 1·670 | 20 | ... |
| Cooma ..... | 52 | 2637 | ... | 49·9 | ... | S. | 2·5 | 5·3 | 67·2 | 32·6 | 77·6 | 17·8 | 1·530 | 5 | 0·500 | 21 | 1·150 |
| Albury ..... | 175 | 572 | ... | ... | ... | ..... | ... | ... | ... | ... | .. | ... | ... | ... | ... | ... | ... |
| Eden..... | 0 | 107 | 30·126 | 54·2 | 75·0 | S.W. | 1·1 | 5·0 | 62·0 | 46·4 | 76·0 | 39·1 | 2·610 | 11 | 0·650 | 21 | ... |

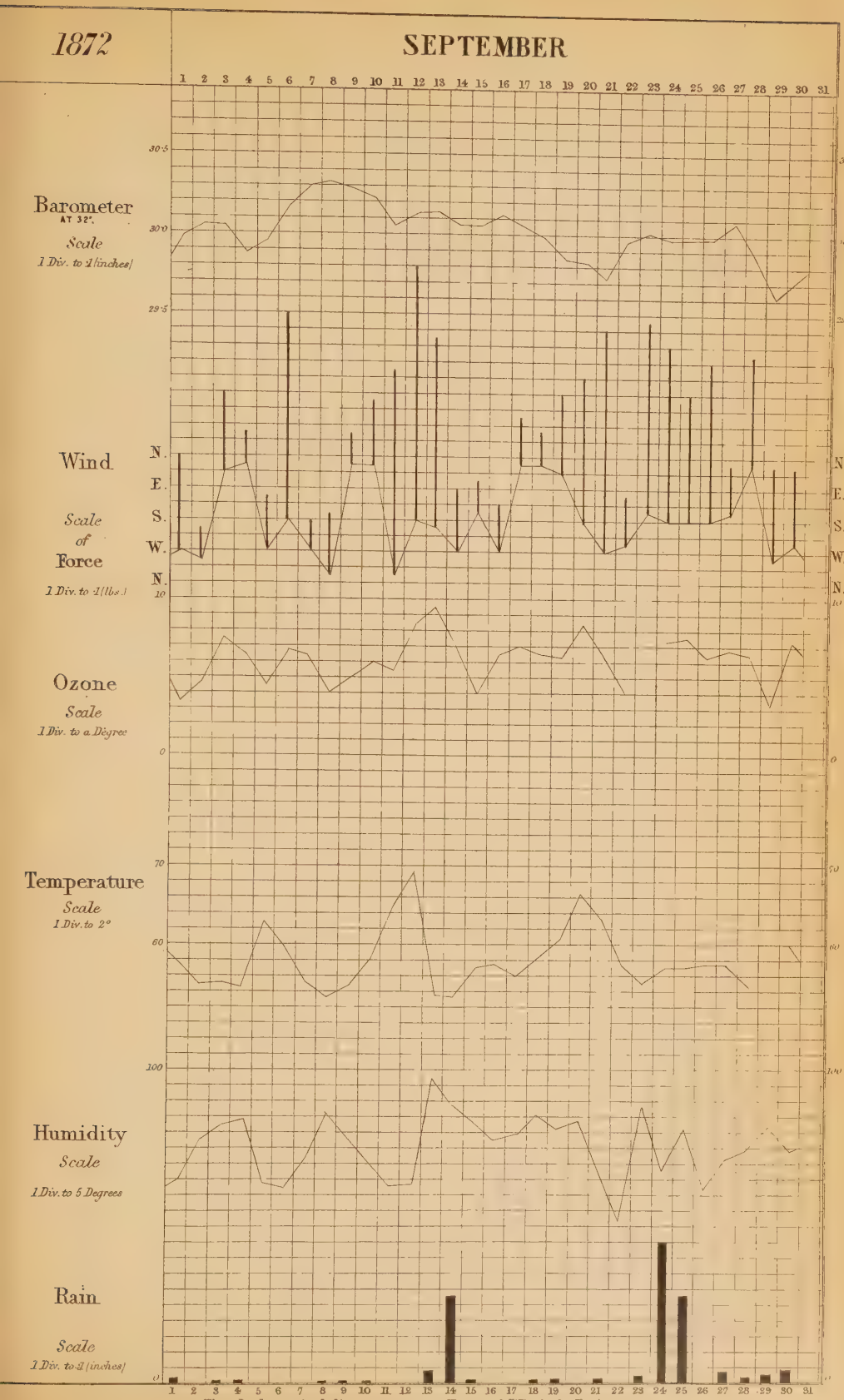
* 12th and 14th.

Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only twelve of the stations have barometers.

## REMARKS.

Bourke—Observer absent. Returns from 26th only.
Port Macquarie—Thunderstorm, 14th; thick weather, 24th and 25th; squally, 26th.
Cassilis—Hot, 12th.
Muswellbrook—Showery, 25th, 29th, and 30th.
Dubbo—Raining, 2nd, 4th, and 13th.
Mudgee—Heavy rain, 29th.
West Maitland—Hot, 20th.
Lambton—Thunderstorm, 30th; lightning during month.
Newcastle—Stormy, 24th; brilliant meteor, 28th.
Orange—Thunderstorm, 1st; Frosty, 3rd and 8th.
Bathurst—Frosty, 3rd; foggy, 17th.
Kurrajong—Thunderstorm, 29th; boisterous, 24th; and squally during month.
Mount Victoria—Hot, 10th; thunderstorm, 29th; and foggy during month.
Parramatta—Strong S. wind, 12th.
Sydney—Hot wind, 11th; S. gales, 12th and 20th; dense fog, 18th; and wind and rain storm, 29th.
Liverpool—Heavy S. squall, 29th; and frosty and foggy during month.
Wentworth—Sultry, 19th and 28th; thunderstorm, 20th and 29th; little hail, 22nd.
Cordeaux River—Very warm, 10th, 11th, and 12th; frost, 20th and 28th; S.E. gale, 29th.
Wollongong—Showery, 13th, 24th, and 26th.
Moss Vale—Foggy, 9th; and thunderstorm, 29th.
Terrara—Very hot, 8th to 12th; and southerly on 12th.
Wagga Wagga—Foggy, 9th and 22nd.
Cape St. George—Thunderstorms, 1st, 21st, and 30th; southerly wind, 14th and 15th.
Urana—Strong S.W. winds 20th and 29th.
Deniliquin—Strong cold wind, 21st and 30th.
Kiandra—Thunderstorm, 28th; hailstorm, 20th; and 4 inches snow fell during month.
Cooma—Snow, 14th; storms, 11th and 12th; frosty and foggy during month.
Eden—Heavy thunderstorm, 29th.

# METEOROLOGICAL CURVES




*The dark vertical lines represent Force of Wind & Rain.*

Lithographed at the Surveyor Generals Office, Sydney, Oct^r 1872

*Dew on 3^rd, 6^th, 9^th, 10^th, 18^th, 19^th & 28^th.*

# METEOROLOGICAL OBSERVATIONS

U.S.N. OBSERVATORY
MAY
17
1873

MADE AT THE

# GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

# ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

# MONTH OF OCTOBER, 1872;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1872.

[*Price, 6d.*] 3*u* 45—72

# METEOROLOGICAL OBSERVATIONS.

## GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s

Magnetic Variation 9° 34′ 13″ East.

### OCTOBER, 1872.

### GENERAL ABSTRACT.

| | | | | |
|---|---|---|---|---|
| **BAROMETER** .. At 32° Fah. | Highest Reading ... | ... 30·333 | ... | On the 31st, at 9 a.m. |
| | Lowest Reading ... | ... 29·448 | ... | On the 3rd, at 6 a.m. |
| | Mean Height ... | ... 29·920 | | |

(Being 0·083 in. greater than that in the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **WIND** .. .. | Greatest Pressure... ... | 35·3 lbs.... | On the 4th. |
| | Mean Pressure ... ... | 0·9 lb. | |
| | Number of Days Calm ... | 0 | |
| | Prevailing Direction ... | N.N.E. | |

(Prevailing direction during the same month for the preceding 13 years N.E.)

| | | | |
|---|---|---|---|
| **TEMPERATURE** | Highest in the Shade ... | 87·4 | ... On the 28th. |
| | Lowest in the Shade ... | 46·7 | ... On the 4th. |
| | Greatest Range ... ... | 26·3 | ... On the 22nd. |
| | Highest in the Sun ... | 126·0 | ... On the 28th. |
| | Highest in a Black Box with Glass Top ... ... | 234·5 | ... On the 28th. |
| | Lowest on the Grass ... | 35·6 | ... On the 2nd. |
| | Mean Diurnal Range ... | 14·2 | |
| | Mean in the Shade ... | 63·1 | |

(Being 1·1 less than that of the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **HUMIDITY** .. | Greatest Amount... ... | 100·0 | ... On the 4th. |
| | Least ... ... ... | 29·0 | ... On the 22nd. |
| | Mean ... ... ... | 71·6 | |

(Being 4·3 greater than that of the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **RAIN** .. .. | Greatest Fall ... ... | 2·588 inches. | On the 4th. |
| | Number of Days ... ... | 13 rain and 6 dew. | |
| | Total Fall ... ... | 4·108 inches. | 65 ft. above the ground. |
| | | 5·770 inches. | 15 inches above the ground. |

(Being 3·455 inches greater than that of the same month on an average of the preceding 13 years.)

| | | |
|---|---|---|
| **EVAPORATION** | Total Amount ... ... | 4·665 inches. |
| **OZONE** .. .. | Mean Amount ... ... | 5·9 |

(Being 0·9 greater than that in the same month on an average of the preceding 12 years.)

| | | |
|---|---|---|
| **ELECTRICITY** .. | Number of Days Lightning | 7 |
| **CLOUDY SKY** .. | Mean Amount ... ... | 6·3 |
| | Number of Clear Days ... | 1 |
| **METEORS** .. | Number Observed ... | 2 |

### REMARKS.

The weather during the month was remarkable for the extreme range of temperature and unusual rainfall. At Sydney the thermometer in the shade ranged from 87·4 to 46·7 or 40·7, and at some of the country stations nearly 60°. At Orange, snow fell on the 3rd and 4th, and a hot wind blew on the 29th. At Sydney, the rainfall was 3½ inches greater than the average for October. At the country stations the rainfall varied from 1·300 to 8·513 inches, and was more than 2 inches at all except Bourke, Dubbo, Wentworth, and Cooma.

Hail fell on the 3rd, 8th, and 16th; and thunderstorms were recorded every day except 2nd, 16th, 15th, 18th, 19th, 20th, 21st, 23rd, 25th, 26th, and 31st—the total number being 70.

Snow fell on the 2nd, 3rd, and 4th; at Bathurst on the 4th it was very heavy, and at Kiandra 15 inches fell on the 2nd and 3rd.

The aurora was seen on the 14th, 15th, 16th, 17th, 18th, 19th, and 20th; on the 15th, 17th, and 18th generally over the colony.

On the the 14th, the afternoon tide was unusually high at Sydney, Newcastle, and Eden.

On the 18th a smart shock of earthquake was felt generally over the colony. The direction seems to have been from east to west, and the duration is variously estimated at from three seconds to one or two minutes. At the Observatory it could not have been more than three seconds, and no displacement of the instruments resulted, but at other places the shock was sufficient to stop clocks, and at Cape St. George it stopped the revolving machinery of the lighthouse. At some places a rumbling noise, as of a cart passing over a rough road, was heard. The earthquake was not accompanied by any ocean wave.

## SYDNEY, OCTOBER, 1872.

| Date. | Moon's Phases. | Standard Barometer at 9 a.m., corrected to Mean Sea Level. | Wind. | | Temperature. | | | | | | | | | Humidity. 0–100. | Rain. Inches. | Cl'ds Sky 0–10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Dry. | Wet. | Shade. | | | | Sun. | Grass. | Sea Water. 9 a.m. | | | |
| | | | Prevailing Direction. | Total Velocity. Miles. | Mean 9.3.9. | Mean 9.3.9. | Max. | Min. | Range | Mean. | Max. | Min. | | Mean 9.3.9. | | Taken at 9 & 9. |
| 1 | | 30·046 | N.W. | 160 | 56·7 | 52·7 | 61·0 | 49·2 | 11·8 | 55·1 | 107·9 | 41·4 | 59·9 | 76·0 | 0·095 | 6·0 |
| 2 | | 29·943 | N.N.E. | 338 | 61·0 | 56·0 | 66·5 | 48·7 | 17·8 | 57·6 | 108·0 | 35·6 | 60·3 | 71·7 | 0·001 | 4·5 |
| 3 | (In Equat. N. Moon.) | ·633 | W. | 335 | 59·4 | 53·7 | 67·8 | 54·6 | 13·2 | 61·2 | 108·7 | 41·1 | 60·0 | 68·3 | ·0 | 7·7 |
| 4 | | ·641 | S.S.W. | 926 | 53·8 | 53·5 | 56·6 | 46·7 | 9·9 | 51·7 | 66·5 | 43·6 | 59·7 | 98·0 | 2·588 | 10·0 |
| 5 | | 30·229 | S. | 357 | 55·5 | 51·4 | 60·2 | 51·8 | 8·4 | 56·0 | 99·4 | 46·7 | 59·9 | 74·3 | 1·133 | 9·5 |
| 6 | | ·316 | E.S.E. | 153 | 58·3 | 52·8 | 61·7 | 51·1 | 10·6 | 56·4 | 103·0 | 44·1 | 60·3 | 68·0 | 0·064 | 10·0 |
| 7 | | ·218 | N.N.E. | 311 | 61·5 | 58·0 | 65·4 | 50·6 | 14·8 | 58·0 | 106·0 | 40·1 | 59·9 | 78·7 | ·0 | 0·7 |
| 8 | | ·058 | E. | 222 | 64·2 | 61·6 | 69·6 | 54·6 | 15·0 | 62·1 | 108·0 | 43·1 | 60·1 | 84·3 | 0·001 | 10·0 |
| 9 | G. S. Dec. | 29·986 | N. | 165 | 64·9 | 62·2 | 71·7 | 61·2 | 10·5 | 66·5 | 88·7 | 52·5 | 60·3 | 85·0 | 0·155 | 10·0 |
| 10 | First Qr. | ·936 | W. | 133 | 63·2 | 60·1 | 71·1 | 59·1 | 12·0 | 65·1 | 111·3 | 53·1 | 59·9 | 81·7 | 0·250 | 4·0 |
| 11 | | ·952 | W. | 183 | 61·0 | 60·3 | 65·6 | 55·7 | 9·9 | 60·7 | 102·2 | 43·0 | 60·1 | 95·3 | 0·003 | 10·0 |
| 12 | | ·844 | W. | 138 | 66·3 | 64·7 | 76·1 | 58·6 | 17·5 | 67·4 | 118·0 | 54·8 | 60·3 | 90·3 | 0·307 | 9·7 |
| 13 | Perigee | ·951 | N.N.E. | 383 | 65·7 | 64·0 | 73·1 | 59·0 | 14·1 | 66·1 | 116·2 | 51·0 | 60·1 | 89·0 | 0·003 | 0·0 |
| 14 | | ·730 | ..... | ..... | 72·3 | 62·7 | 80·8 | 62·6 | 18·2 | 71·7 | 120·9 | 58·1 | 61·1 | 57·7 | 0·416 | 2·7 |
| 15 | | ·956 | N.N.W. | 266 | 65·6 | 56·2 | 74·1 | 56·8 | 17·3 | 65·5 | 116·0 | 41·1 | 61·3 | 54·7 | ·0 | 1·7 |
| 16 | In Equat. | 30·099 | W.S.W. | 233 | 61·8 | 55·5 | 68·4 | 53·7 | 14·7 | 61·1 | 108·0 | 42·1 | 61·7 | 66·7 | ·0 | 2·3 |
| 17 | Full Moon | ·342 | E.N.E. | 162 | 57·4 | 53·9 | 64·0 | 51·5 | 12·5 | 57·8 | 106·0 | 44·7 | 61·8 | 78·7 | 0·496 | 4·0 |
| 18 | | ·363 | N.N.E. | 234 | 61·7 | 56·2 | 66·1 | 50·6 | 15·5 | 58·4 | 107·6 | 40·9 | 62·3 | 69·3 | 0·073 | 0·3 |
| 19 | | ·321 | N.E. | 285 | 63·6 | 57·6 | 68·7 | 52·3 | 16·4 | 60·5 | 108·6 | 37·1 | 62·1 | 67·8 | ·0 | 3·7 |
| 20 | | ·435 | E.N.E. | 204 | 63·3 | 59·3 | 69·6 | 55·4 | 14·2 | 62·5 | 112·4 | 43·1 | 62·7 | 76·0 | 0·001 | 9·0 |
| 21 | | ·332 | N.N.W. | 332 | 67·6 | 59·8 | 75·1 | 55·8 | 19·3 | 65·5 | 115·0 | 41·5 | 63·2 | 61·7 | 0·001 | 3·7 |
| 22 | G. N. Dec. | ·041 | N·W. | 399 | 77·8 | 61·6 | 85·3 | 59·0 | 26·3 | 72·2 | 122·0 | 45·4 | 62·9 | 38·7 | ·0 | 3·3 |
| 23 | | ·181 | N.N.E. | 259 | 63·9 | 57·2 | 67·7 | 60·5 | 7·2 | 64·1 | 100·1 | 50·0 | 63·3 | 64·3 | ·0 | 10·0 |
| 24 | Last Qr. | 29·978 | E. | 294 | 68·4 | 62·9 | 77·9 | 59·9 | 18·0 | 68·9 | 113·0 | 49·7 | 63·4 | 70·7 | ·0 | 9·0 |
| 25 | Apogee | 30·121 | S.E. | 198 | 63·2 | 57·3 | 68·8 | 57·3 | 11·5 | 63·0 | 108·6 | ... | 63·7 | 67·7 | ·0 | 10·0 |
| 26 | | ·329 | N. | 242 | 62·9 | 57·5 | 69·3 | 57·5 | 11·8 | 63·4 | 111·5 | 47·1 | 64·1 | 70·0 | 0·001 | 4·2 |
| 27 | | ·168 | E. | 203 | 68·8 | 61·4 | 80·7 | 55·2 | 25·5 | 68·0 | 116·0 | 45·0 | 64·3 | 63·0 | ·0 | 10·0 |
| 28 | | 29·940 | N.E. | 253 | 77·2 | 66·6 | 87·4 | 63·2 | 24·2 | 75·3 | 126·0 | 52·1 | 64·1 | 54·0 | ·0 | 7·0 |
| 29 | | ·733 | S. | 455 | 69·9 | 60·9 | 76·1 | 72·6 | 3·5 | 74·4 | 104·4 | 60·0 | 64·7 | 57·3 | ·0 | 8·7 |
| 30 | In Equat. | 30·136 | S. | 437 | 61·2 | 54·4 | 64·9 | 57·6 | 7·3 | 61·3 | 107·4 | 49·7 | 64·9 | 63·0 | 0·121 | 8·0 |
| 31 | | ·349 | E.S.E. | 180 | 60·3 | 56·6 | 65·1 | 54·7 | 10·4 | 59·9 | 89·0 | 49·2 | 64·7 | 78·0 | 0·061 | 6·7 |
| Means | ..... | 30·074 | N.N.E. | 8440 | 63·8 | 58·3 | 70·2 | 56·0 | 14·2 | 63·1 | 107·6 | 46·2 | 61·8 | 71·6 | Sum. 5·770 | 6·3 |

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.
The Barometer at 9 a.m. reads 0·019 above the true mean for the day.
Heavy dew 2nd, 8th, 11th, 13th, 20th, and 21st.

## SYDNEY, OCTOBER, 1872.

| Date. | Evaporation. Inches. | Ozone, 0-10. Day. | Night. | Mean. | Remarks. |
|---|---|---|---|---|---|
| 1 | 0·127 | 5·0 | 6·5 | 5·8 | 1.—Cloudy from 8·30 a.m. until after 12 p.m. Atmosphere very clear all afternoon. |
| 2 | 0·154 | 5·5 | 7·5 | 6·5 | 2.—Light clouds until about 2 p.m., and again from 4 p.m. until after 8 p.m. Fresh breeze during day. Lightning N., at 10·45 p.m. |
| 3 | ... | 6·0 | 8·5 | 7·3 | 3.—Cloudy. Thunderstorm W., at 11·26 a.m. Shower of hail and rain at 11·39 a.m.; afterwards dropping rain at intervals. Thunder again W., at 3·10 p.m. Lightning W.N.W., 11·28 a.m., and S.E., E.N.E., and N.E. during evening. |
| 4 | ... | ... | 9·0 | ... | 4.—Cloudy and very stormy. Raining very heavily all morning from 1·45 a.m. Rained also during day. Thunder during morning. Lightning, 9·50 a.m. Cold day. |
| 5 | 0·124 | 6·5 | 8·5 | 7·5 | 5.—Cloudy and dull, strong breeze and cold. Afternoon and evening cloudy and showery. Evening fine from 7·30 p.m. until 8·15 p.m. |
| 6 | 0·082 | ... | ... | 4·0 | 6.—Cloudy during day, and very dull like rain. |
| 7 | 0·155 | 6·5 | 7·5 | 7·0 | 7.—Cloudy from 11 a.m. until noon, and again between 4 p.m. and 7 p.m. Fresh breeze in afternoon. Dew falling in the evening. No clouds at 9 p.m. |
| 8 | 0·107 | 6·0 | 7·5 | 6·8 | 8.—Cloudy. Thunder W., 3·8 p.m. Vivid lightning from N.W. to S.W. Heavy discharges of thunder at 4 p.m. with heavy rain from 4·30 p.m. until 5·20 p.m. Dropping rain, 4·24 p.m. and 9·12 p.m. |
| 9 | 0·034 | 8·0 | 8·5 | 8·3 | 9.—Cloudy, dull. Thunder S.S.W, 3·39 p.m. Drops of rain, 8 57 a.m. Shower, 11 a.m., and light steady rain all afternoon and evening. Lunar halo at 9·11 p.m. |
| 10 | 0·119 | 7·0 | 5·5 | 6·3 | 10.—Cloudy until 2·30 p.m., and again from 7 p.m. until 8·15 p.m. Heavy dew fell in the evening. |
| 11 | 0·009 | 8·0 | 8·5 | 8·3 | 11.—Cloudy and dull, morning foggy looking. Dropping rain, 1·55 p.m. Steady rain all afternoon and evening. |
| 12 | 0·137 | 7·0 | 7·5 | 7·3 | 12.—Fine from 1 p.m. until 2·30 p.m. Morning foggy. Heavy dew fell in the evening. Very warm during day. |
| 13 | 0·192 | ... | ... | 4·3 | 13.—Morning foggy until 7·30 a.m. Fine from 8·45 a.m. until 1 p.m., and again from 1·30 p.m. until towards evening. |
| 14 | 0·320 | 4·5 | 5·0 | 4·8 | 14.—Cloudy from 9·30 a.m. until about 11·30 a.m. Very warm. Thunderstorm S.W. with lightning and rain at 2·5 a.m. Very dry fresh breeze. |
| 15 | 0·248 | 5·0 | 6·5 | 5·8 | 15.—Fine, very dry, and warm. Very brilliant aurora visible at 8 p.m., rose pink color; and disappeared at 8·20 p.m.; streamers S. at 8·6 p.m. |
| 16 | 0·140 | 6·5 | 8·0 | 7·3 | 16.—Cloudy after 4·30 p.m. Thunderstorm from W. from 4·39 p.m. until 5·45 p.m. Thunder S., at 9·36 p.m., and again after midnight. Lightning all round, and thunder showers. |
| 17 | 0·101 | 6·0 | 7·0 | 6·5 | 17.—Morning cloudy until after 11 a.m. Steady rain until 10·45 a.m. Dew fell in the evening. Fine aurora visible at 8 p.m.; disappeared at 8·35 p.m. |
| 18 | 0·190 | 5·5 | 6·5 | 6·0 | 18.—Fine. Fresh breeze. Light dew fell in the night. Fine aurora, 7·40 p.m. until 8·35 p.m., with fine pink streamers. Shock of earthquake at 6·53 p.m. |
| 19 | 0·199 | 5·0 | 7·0 | 6·0 | 19.—Cloudy and fine alternately. Dry breeze. Clouds light in the forenoon. |
| 20 | 0·165 | ... | ... | 4·0 | 20.—Cloudy and fine alternately during forenoon. Light dew fell in the night. |
| 21 | 0·232 | 5·5 | 6·0 | 5·8 | 21.—Cloudy in forenoon, clouds very light. Fresh breeze. Atmosphere very dry throughout the day. |
| 22 | 0·372 | 3·0 | 6·5 | 4·8 | 22.—Morning cloudy, and again at 5·20 p.m., like thunderstorm approaching until 7·30 p.m. Lightning S.E., 9·48 p.m. Meteor observed E. at 10·57 p.m. Hot wind during day. |
| 23 | 0·122 | 4·0 | 6·5 | 5·3 | 23.—Cloudy and dull like rain. S. gale at midnight. Also fresh breeze during day. |
| 24 | 0·170 | 6·0 | 6·5 | 6·3 | 24.—Cloudy and fine alternately in forenoon. Afternoon and evening cloudy, like thunderstorm. Fine at 10 p.m. S. gale at 10·15 p.m. Drops of rain, 8·24 a.m. |
| 25 | 0·131 | 4·5 | 6·0 | 5·3 | 25.—Cloudy and dull like rain. Sprinkling rain, 8·40 a.m. and again at 9·33 a.m. Fine at 11 p.m. Partial clearing of clouds between 12 p.m. and 2 p.m. |
| 26 | 0·144 | 5·0 | 7·0 | 6·0 | 26.—Cloudy and dull until 2·45 p.m. Light shower at 7·25 a.m. Fresh breeze during day. |
| 27 | 0·112 | ... | ... | 3·8 | 27.—Fine at 9·20 p.m. Clouds were light during day, and became heavier towards evening. |
| 28 | 0·262 | 3·5 | 4·0 | 3·8 | 28.—Very dry and hot. Cloudy after 12·30 p.m. Evening cloudy and fine. Fresh breeze between 1 p.m. and 5 p.m. |
| 29 | 0·209 | 5·0 | 5·0 | 5·0 | 29.—Fine between 4 p.m. and 8 p.m. and strong breeze blowing. Thunder W., at 12 p.m. Clouds passed over to the coast. |
| 30 | 0·221 | 5·0 | 8·0 | 6·5 | 30.—Afternoon and evening fine after 2 p.m. Light rain fell at 8·57 a.m. Strong breeze during day. Meteor observed E. at 8·4 p.m. |
| 31 | 0·087 | 4·5 | 6·5 | 5·5 | 31.—Fine after 4 p.m. Forenoon very dull like rain. Evening hazy and heavy dew falling. |
| | Sum. | | | | |
| Means | 4·665 | 5·5 | 6·9 | 5·9 | |

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.

Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

| Date. | Self-registering Barometer at 32°. | | | | | Self-registering Anemometer. | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mean. | Max. | Hour. | Min. | Hour. | S. | S.S.W. | S.W. | W.S.W. | W. | W.N.W. | N.W. | N.N.W. | N. | N.N.E. | N.E. | E.N.E. | E. | E.S.E. | S.E. | S.S.E. | Velocity. Total. Miles. | Velocity. Mean. pr. hr. | Mean Pressure. lbs. | Greatest Pressure. Direction of Wind. Time. | | |
| 1 | 29·846 | 29·896 | 9 a.m. | 29·802 | 4 a.m. | ... | ... | ... | 1 | ... | ... | 7 | 4 | ... | ... | ... | 6 | 4 | 1 | ... | 1 | 160 | 6·7 | 0·2 | 1·1 | E.N.E. | 4·55 p.m. |
| 2 | 29·626 | 29·820 | 9 a.m. | 29·515 | 8 a.m. | ... | ... | ... | ... | 1 | 2 | ... | ... | 1 | 13 | 4 | ... | 3 | ... | ... | ... | 338 | 14·1 | 1·0 | 4·5 | N.E. | 8· 2 p.m. |
| 3 | 29·483 | 29·550 | 8 p.m. | 29·448 | 6 a.m. | 1 | ... | 2 | 3 | 5 | 4 | 3 | ... | ... | ... | ... | 3 | ... | 1 | 1 | 1 | 335 | 14·0 | 1·0 | 4·2 | W.N.W. | 1·39 a.m. |
| 4 | 29·785 | 30·045 | 8 a.m. | 29·500 | 10 a.m. | 5 | 18 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 926 | 38·6 | 7·4 | 35·3 | S.S.W. | 6· 0 p.m. |
| 5 | 30·117 | 30·170 | 12 p.m. | 30·060 | 2,3,& 4 p.m. | 10 | 6 | ... | 2 | 3 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 357 | 14·9 | 1·1 | 6·5 | S.S.W. | 9·55 a.m. |
| 6 | 30·087 | 30·150 | 9 & 10 a.m. | 30·040 | 4 a.m. | 1 | ... | ... | ... | ... | ... | ... | ... | 7 | ... | 2 | 3 | 1 | 8 | 1 | 1 | 153 | 6·4 | 0·2 | 0·8 | E.S.E. | 2·10 p.m. |
| 7 | 29·963 | 30·085 | 9 a.m. | 29·914 | 3 a.m. | ... | ... | ... | ... | ... | ... | ... | 3 | 6 | 7 | 7 | 1 | ... | ... | ... | ... | 311 | 13·0 | 0·9 | 5·4 | N.N.E. | 6·42 p.m. |
| 8 | 29·847 | 29·930 | 9 a.m. | 29·795 | 3 p.m.&3a.m. | ... | 1 | ... | ... | ... | ... | ... | 3 | 4 | 3 | 3 | 6 | 1 | ... | ... | ... | 222 | 9·3 | 0·4 | 3·4 | N.E. | 2·15 p.m. |
| 9 | 29·794 | 29·849 | 10 a.m. | 29·740 | 3 a.m. | ... | ... | 1 | 2 | 3 | ... | ... | 5 | 8 | 1 | 1 | ... | 2 | 1 | ... | ... | 165 | 6·9 | 0·2 | 1·3 | W.S.W. | 8·10 a.m. |
| 10 | 29·785 | 29·828 | 9 p.m. | 29·748 | 3 p.m. | 2 | ... | 2 | 1 | 11 | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 6 | 1 | 133 | 5·5 | 0·2 | 1·3 | W.S.W. | 10·46 a.m. |
| 11 | 29·683 | 29·800 | 9 a.m. | 29·610 | 2 a.m. | ... | 1 | ... | 4 | 7 | 1 | 1 | ... | 2 | 4 | 2 | 2 | ... | ... | ... | ... | 183 | 7·6 | 0·3 | 3·4 | N.N.E. | 10·20 p.m. |
| 12 | 29·748 | 29·815 | 8 a.m. | 29·671 | 2 p.m. | 6 | 1 | ... | ... | 9 | 1 | ... | ... | ... | ... | ... | ... | 3 | 1 | 2 | 1 | 138 | 5·8 | 0·2 | 1·1 | E.N.E. | 2·18 p.m. |
| 13 | 29·629 | 29·810 | 9 a.m. | 29·525 | 5 a.m. | ... | ... | ... | 1 | 1 | ... | 1 | 1 | 6 | 9 | 2 | 1 | 1 | 1 | ... | ... | 383 | 16·0 | 1·3 | 6·5 | N.N.E. | 4· 6 p.m. |
| 14 | 29·683 | 29·820 | 8 a.m. | 29·560 | 3 p.m. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ..... | ..... |
| 15 | 29·831 | 29·945 | 8 a.m. | 29·735 | 3 & 4 p.m. | ... | 3 | 2 | 2 | 9 | 1 | 1 | ... | ... | ... | 1 | 4 | ... | ... | ... | ... | 266 | 11·1 | 0·6 | 2·4 | E.N.E. | 3·57 p.m. |
| 16 | 30·024 | 30·180 | 8 a.m. | 29·900 | 3 p.m. | 2 | 3 | 1 | 6 | 2 | 1 | ... | ... | ... | ... | ... | 2 | 2 | 2 | 2 | 1 | 233 | 9·7 | 0·5 | 6·5 | S.S.W. | 5· 8 p.m. |
| 17 | 30·227 | 30·264 | 8 a.m. | 30·187 | 4 p.m. | ... | 1 | ... | 1 | ... | ... | ... | 2 | 5 | ... | ... | 6 | 4 | 4 | ... | 1 | 162 | 6·8 | 0·2 | 0·8 | E. | 7· 0 p.m. |
| 18 | 30·197 | 30·270 | 9 a.m. | 30·160 | 5 p.m. | ... | ... | ... | ... | ... | ... | 2 | ... | ... | 11 | 5 | 5 | 1 | ... | ... | ... | 234 | 9·8 | 0·5 | 4·2 | N.E. | 4·55 p.m. |
| 19 | 30·208 | 30·260 | 4 a.m. | 30·150 | 3 & 4 p.m. | 7 | ... | ... | 2 | ... | ... | ... | ... | ... | 1 | 9 | 4 | ... | ... | ... | 1 | 285 | 11·9 | 0·7 | 3·6 | N.E. | 3·43 p.m. |
| 20 | 30·262 | 30·329 | 10 a.m. | 30·222 | 3 a.m. | 2 | 2 | ... | ... | ... | ... | ... | ... | ... | 1 | 6 | 8 | 3 | 1 | 1 | ... | 204 | 8·5 | 0·4 | 2·4 | N.N.E. | 7·50 a.m. |
| 21 | 30·021 | 30·250 | 9 a.m. | 29·970 | 3 a.m. | ... | ... | ... | ... | ... | 3 | 1 | 7 | 2 | 6 | 4 | 1 | ... | ... | ... | ... | 332 | 13·8 | 1·0 | 13·0 | N.N.E. | 7·15 p.m. |
| 22 | 29·823 | 30·020 | 8 a.m. | 29·695 | 3 p.m. | 5 | ... | ... | ... | 3 | 3 | 6 | 3 | ... | ... | ... | ... | ... | ... | 1 | 3 | 399 | 16·6 | 1·4 | 9·7 | S. | 12·20 a.m. |
| 23 | 30·008 | 30·080 | 10 a.m. | 29·917 | 3 a.m. | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 11 | 3 | 3 | 2 | 3 | 1 | ... | 259 | 10·8 | 0·6 | 2·4 | N.E. | 7·53 p.m. |
| 24 | 29·843 | 30·010 | 8 a.m. | 29·720 | 3 & 4 p.m. | 3 | 3 | 1 | 3 | 2 | ... | 1 | ... | 3 | ... | ... | ... | 7 | 1 | ... | ... | 294 | 12·3 | 0·7 | 8·0 | S.S.W. | 11·15 p.m. |
| 25 | 30·096 | 30·225 | 8 a.m. | 29·990 | 2 p.m. | 1 | 2 | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 19 | ... | 198 | 8·3 | 0·3 | 1·6 | S.E. | 3·22 p.m. |
| 26 | 30·144 | 30·213 | 10 a.m. | 30·090 | 8 a.m. | ... | ... | ... | ... | ... | ... | ... | 3 | 6 | 2 | 4 | 4 | 4 | ... | ... | 1 | 242 | 10·1 | 0·5 | 2·4 | N.E. | 5·19 p.m. |
| 27 | 29·913 | 30·060 | 9 a.m. | 29·860 | 2 & 4 a.m. | ... | ... | ... | ... | ... | 3 | ... | ... | 1 | ... | 3 | 7 | 9 | ... | ... | 1 | 203 | 8·5 | 0·4 | 1·6 | E.N.E. | 12·47 p.m. |
| 28 | 29·653 | 29·840 | 9 a.m. | 29·552 | 2 a.m. | ... | 1 | 2 | ... | 2 | 2 | 3 | 3 | 1 | 3 | 4 | 2 | 1 | .. | ... | ... | 253 | 10·5 | 0·6 | 3·9 | N.N.E. | 4· 0 p.m. |
| 29 | 29·723 | 29·985 | 8 a.m. | 29·535 | 3 & 4 p.m. | 1 | 4 | 6 | 6 | 4 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 455 | 19·0 | 1·8 | 6·5 | W. | 4·55 p.m. |
| 30 | 30·223 | 30·330 | 8 a.m. | 30·100 | 9 & 10 a.m. | 9 | 6 | 5 | ... | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 437 | 18·2 | 1·7 | 7·6 | S. | 2· 8 p.m. |
| 31 | 30·264 | 30·333 | 9 a.m. | 30·220 | 3 a.m. | 3 | 2 | ... | 3 | 5 | ... | ... | ... | ... | ... | ... | ... | ... | 9 | 1 | 1 | 180 | 7·5 | 0·3 | 2·0 | S.S.W. | 10· 8 a.m. |
| Sums or Means. | 29·920 | Oct. 31st. 30·333 | 9 a.m. | Oct. 3rd. 29·448 | 6 a.m. | 58 | 54 | 24 | 38 | 70 | 26 | 26 | 34 | 53 | 72 | 60 | 65 | 54 | 34 | 35 | 16 | Sum 8440 | Mean. 11·7 | Mean. 0·9 | | | |

The self-registering Barometer is photographic, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot is obtained

# ABSTRACT FROM METEOROLOGICAL STATIONS,

## For the Month of OCTOBER, 1872.

| Stations. | Least Distance from East Coast in miles. | Height above sea in feet. | Mean of Observations taken at 9 a.m., October, 1872. | | | | | | Temperature in Shade. | | | | For 24h. previous to 9 a.m. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Barometer. | Temperature in Shade. | Humidity 0 to 100. | Wind. | | Clouds. 0-10. | | | | | Rain. | | | | Evaporation in inches. |
| | | | | | | Direction | Force. 0-6 | | Mean Max. | Mean. Min. | Extreme Max. | Extreme Min. | Total Fall, inches. | No. of Days | Greatest Fall, inches. | Date | |
| Tenterfield ... | 80 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Grafton ..... | 22 | ... | ... | 66·4 | ... | S.E. | 0·5 | 4·5 | 79·2 | 53·6 | 90·2 | 44·7 | 2·365 | 7 | 0·520 | 19 | 1·070 |
| Bourke ..... | 393 | ... | ... | 67·1 | ... | S. | 0·0 | 2·5 | 77·0 | 57·1 | 95·9 | 43·9 | 1·580 | 8 | 0·550 | 12 | ... |
| Narrabri ..... | 196 | ... | ... | 67·9 | ... | N.W. | 1·2 | 2·1 | 78·5 | 57·2 | 95·9 | 39·5 | 3·960 | 9 | 2·100 | 12 | 6·178 |
| Armidale..... | 80 | 3278 | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Port Macquarie | 0 | ... | ... | 63·2 | ... | S. | 1·9 | 4·5 | 70·6 | 55·8 | 75·2 | 47·8 | 4·480 | 16 | 1·460 | 5 | 6·310 |
| Murrurundi ... | 94 | 1545 | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Cassilis ..... | 120 | ... | ... | 60·1 | ... | S.E. | 0·1 | ... | 73·7 | 46·5 | 91·1 | 32·2 | 2·120 | 5 | 0·950 | 12 | ... |
| Muswellbrook.. | 68 | ... | ... | 64·2 | ... | N.W. | 2·2 | ... | 77·6 | 50·7 | 93·5 | 40·3 | 8·513 | 6 | 1·420 | 6 | 8·513 |
| Dubbo ..... | 182 | ... | ... | 62·3 | ... | N.E. | 0·2 | ... | 73·3 | 51·3 | 81·9 | 39·9 | 1·500 | 6 | 0·550 | 11 | 5·401 |
| Mudgee ..... | 121 | ... | ... | 55·1 | ... | W. | 0·5 | ... | 62·6 | 47·6 | 86·4 | 36·0 | 2·950 | 5 | 1·280 | 12 | ... |
| Dalwood ..... | 27 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 2·180 | 8 | 0·650 | 4 | ... |
| West Maitland | 18 | ... | ... | 64·9 | ... | S.W. | 1·8 | 6·0 | 73·7 | 56·0 | 92·1 | 46·2 | 2·980 | 13 | 0·840 | 5 | 4·533 |
| Lambton ..... | 7 | ... | ... | 59·3 | ... | W. | 1·5 | ... | 71·9 | 46·6 | 91·3 | 38·0 | 4·350 | 14 | 1·200 | 5 | 4·488 |
| Newcastle ..... | 1 | 112 | 30·044 | 64·2 | 75·0 | N.W. | 0·2 | 4·4 | 72·3 | 56·1 | 94·3 | 44·3 | 4·250 | 15 | 0·920 | 5 | ... |
| Orange..... | 124 | 2891 | ... | 54·1 | ... | S. | 1·7 | ... | 64·6 | 43·6 | 76·2 | 32·6 | 4·920 | 11 | 1·240 | 14 | 3·608 |
| Bathurst ..... | 96 | 2200 | 29·988 | 54·9 | 90·0 | N.W. | 1·2 | 3·7 | 70·9 | 38·9 | 86·5 | 26·0 | 3·440 | 8 | 1·210 | 14 | ... |
| Kurrajong ..... | 36 | 1870 | ... | 55·6 | ... | W. | ... | ... | 63·8 | 47·3 | 82·0 | 39·0 | 2·750 | 7 | 1·700 | 4 | ... |
| Mount Victoria | 61 | 3490 | 30·003 | 55·0 | 70·0 | W. | 0·1 | 6·0 | 67·2 | 42·8 | 83·1 | 30·9 | 2·230 | 7 | 0·670 | 14 | 4·267 |
| Woodford ..... | 50 | 2192 | 29·943 | 60·3 | ... | N.E. | 0·1 | ... | 68·7 | 51·8 | 80·5 | 42·4 | 3·330 | 9 | 0·910 | 4 | ... |
| Parramatta..... | 16 | ... | ... | 66·2 | ... | S. | 0·1 | 5·6 | 81·1 | 51·2 | 98·1 | 41·9 | 5·550 | 12 | * | * | ... |
| Sydney..... | 5 | 155 | 30·074 | 63·1 | 71·6 | N.N.E. | 0·9 | 6·3 | 70·2 | 56·0 | 87·4 | 46·7 | 5·770 | 13 | 2·588 | 4 | 4·665 |
| Liverpool..... | 16 | ... | 30·053 | 61·7 | ... | W. | 0·7 | 5·0 | 71·8 | 51·5 | 87·0 | 42·0 | 4·158 | 14 | 1·611 | 4 | ... |
| Wentworth..... | 476 | ... | ... | 64·9 | ... | S.W. | 2·1 | 3·3 | 76·9 | 52·8 | 92·3 | 40·5 | 1·300 | 9 | 0·440 | 13 | 7·221 |
| Wilton ..... | 13 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 3·660 | 7 | 1·600 | 4 | ... |
| Cordeaux River | 6 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 5·310 | 9 | 2·030 | 11 | ... |
| Young ..... | 140 | ... | ... | 56·8 | ... | W.N.W. | 0·9 | ... | 71·7 | 41·8 | 86·0 | 30·1 | 3·970 | 7 | 0·680 | 14 | 5·986 |
| Wollongong ... | 0 | ... | ... | 61·1 | ... | S. | 1·6 | ... | 69·2 | 53·0 | 85·9 | 43·7 | 3·240 | 6 | 1·120 | 9 | 4·448 |
| Moss Vale ..... | 31 | ... | ... | 56·0 | ... | N.W. | 1·5 | ... | 64·6 | 47·4 | 81·4 | 37·2 | 5·860 | 9 | 2·700 | 4 | ... |
| Goulburn..... | 54 | 2129 | 30·091 | 53·8 | 69·0 | W. | 0·0 | 2·0 | 69·1 | 38·5 | 86·0 | 28·1 | 3·610 | 6 | 1·900 | 4 | 5·578 |
| Terrara..... | 4 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | .... | 4·360 | 11 | 1·750 | 4 | ... |
| Wagga Wagga | 161 | ... | ... | 59·4 | ... | W. | 0·9 | ... | 70·0 | 48·8 | 88·1 | 37·9 | 3·510 | 8 | 1·250 | 14 | 5·892 |
| Cape St. George | 0 | 170 | 30·000 | 61·4 | 75·0 | N.E. | 1·4 | 5·4 | 69·2 | 53·6 | 84·2 | 46·6 | 4·436 | 11 | 1·110 | 4 | ... |
| Queanbeyan ... | 60 | ... | ... | 52·9 | ... | N.W. | 0·4 | ... | 60·7 | 45·0 | 70·2 | 34·1 | 2·600 | 7 | 0·700 | 4 | 5·750 |
| Urana ..... | 218 | ... | ... | ... | ... | N.W. | 0·8 | 4·1 | ... | 49·6 | ... | 38·1 | 4·920 | 7 | 1·840 | 9 | 7·889 |
| Deniliquin ..... | 287 | 410 | 30·154 | 56·1 | 71·0 | N.W. | 1·8 | 2·4 | 73·2 | 39·0 | 87·6 | 30·2 | 2·870 | 10 | 1·100 | 14 | ... |
| Kiandra ..... | 88 | 4640 | 30·048 | 42·5 | 68·0 | N.W. | 1·2 | 4·0 | 55·1 | 29·8 | 65·9 | 13·2 | 3·420 | 9 | 1·420 | 13 | ... |
| Cooma ..... | 52 | 2637 | ... | 54·6 | ... | N. | 2·6 | 5·3 | 70·6 | 38·6 | 82·6 | 24·8 | 1·260 | 6 | 0·410 | 14 | 2·710 |
| Albury..... | 175 | 572 | ... | ... | ... | ..... | ... | ... | ... | ... | .. | ... | ... | ... | ... | ... | ... |
| Eden..... | 0 | 107 | 29·995 | 60·4 | 69·0 | S.W. | 1·2 | 4·9 | 68·3 | 52·5 | 84·0 | 44·1 | 3·830 | 9 | 1·270 | † | ... |

* Observer absent. † 4th and 14th.

ranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only twelve of the stations have barometers.

REMARKS.

## REMARKS.

Grafton—Stormy, 5th.
Bourke—Thunderstorms, 9th, 13th, and hot wind, 28th.
Port Macquarie—Hailstorm, 3rd; and thunderstorms during month.
Cassilis—Thunderstorm, 3rd.
Muswellbrook—Aurora and shock of earthquake, 18th; and thunderstorms during month.
Dubbo—Sultry, 7th.
Mudgee—Thunderstorm, 29th.
Dalwood—Auroras, 17th and 18th; shock of earthquake, 18th.
West Maitland—River up 9 ft. on 14th; thunderstorm, 29th, hot wind, 29th.
Lambton—Auroras, 15th and 18th; shock of earthquake, 18th; thunderstorms, 1st and 30th; and lightning frequent.
Newcastle—Aurora and shock of earthquake, 18th; heavy sea, 1st, 5th, and 30th; and stormy, 4th, 5th, and 30th.
Orange—Auroras, 14th, 15th, 17th, and 18th; earthquake shock, 18th; snow, 3rd and 4th; frost, 1st; and thunderstorm, 29th.
Bathurst—Very heavy fall of snow, 4th.
Kurrajong—Aurora, 18th; shock of earthquake, 18th; storms during month; and bush fires, 27th, and 28th.
Mount Victoria—Snow, 4th; auroras, 15th and 18th; shock of earthquake, 18th; thunderstorms, 22nd and 29th; and foggy, 23rd and 25th.
Parramatta—Observer absent when heaviest rain fell between 3rd and 8th; Auroras, 15th, 17th, and 18th; shock of earthquake, 18th; hailstorm, 16th; and thunderstorm, 29th.
Sydney—Auroras, 15th, 17th, and 18th; earthquake shock, 18th; S. gales, 23rd and 24th; hot wind, 22nd; hail, 3rd; and thunderstorms, 3rd, 8th, 14th, 16th, and 24th.
Liverpool—Auroras, 17th and 18th; shock of earthquake 18th; thunderstorms, 3rd, 8th, 14th, 16th, and 17th hot wind, 23rd; and foggy during month.
Wentworth—Auroras, 17th and 18th; hot wind, 22nd; and thunderstorms during month.
Cordeaux River—Thunderstorms, 3rd, 9th, 10th; and S gales, 4th, 5th, and 23rd.
Moss Vale—Auroras, 14th, 17th, and 18th; shock of earth quake, 18th; rain and wind storm, 4th; and thunde and hailstorm, 16th.
Goulburn—Auroras, 15th, 17th, and 20th; shock of earth quake, 18th; and thunderstorm, 28th.
Terrara—Auroras, 15th, 16th, 17th, 18th, and 19th; earth quake shock, 18th; thunderstorms, 3rd, 8th, and 29th hot winds, 22nd, 28th, and 29th; and southerly gal 4th.
Cape St. George—Auroras, 15th, 17th, and 18th; shock earthquake, 18th; thunderstorms and hot winds durin month.
Queanbeyan—Auroras, 15th, 17th, 18th, and 19th.
Urana—Thunderstorms, 7th, 8th, and 27th; and hail, 8th.
Deniliquin—Auroras, 15th, 16th, and 18th; thunderstorms 7th, 8th, 9th, and 28th.
Kiandra—15 inches snow, 2nd and 3rd; thunderstorms, 8th 12th, and 27th.
Cooma—Thunderstorms, 9th and 28th: stormy, 3rd and 4th and frosty, 1st, 2nd, and 17th.
Eden—Hailstorm, 4th; and Mount Imlay white with hail thick fog, 9th; very high tide, 14th; auroras, 15th, 17th and 18th; thunderstorms, 16th, 22nd, and 28th.

# METEOROLOGICAL CURVES

1872

## OCTOBER

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

**Barometer**
AT 32°
*Scale*
*1 Div. to 1 [inches]*

30·5
30·0
29·5

**Wind**

*Scale of Force*
*1 Div. to 1 [lbs.]*

N.
E.
S.
W.
N.
10

**Ozone**
*Scale*
*1 Div. to a Degree*

0

**Temperature**
*Scale*
*1 Div. to 2°*

70
60

**Humidity**
*Scale*
*1 Div. to 5 Degrees*

100

**Rain**
*Scale*
*1 Div. to 1 [inches]*

0

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

*The dark vertical lines represent Force of Wind & Rain.*

Lithographed at the Surveyor-Generals Office, Sydney.

*Heavy Dew on the 2nd, 8th, 11th, 13th, 20th and 21st. — Force of Wind on 4th 7.4 lbs.*

# METEOROLOGICAL OBSERVATIONS

MADE AT THE

# GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

# ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

# MONTH OF NOVEMBER, 1872;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1873.

*Price, 6d.]* 3u 3—73

# METEOROLOGICAL OBSERVATIONS.

## GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s

Magnetic Variation 9° 34′ 13″ East.

### NOVEMBER, 1872.

### GENERAL ABSTRACT.

**BAROMETER** .. At 32° Fah.

| | | |
|---|---|---|
| Highest Reading ... | 30·296 | ... On the 2nd, at 10 a.m. |
| Lowest Reading ... | 29·420 | ... On the 10th, at 2 and 4 p.m. |
| Mean Height ... | 29·844 | |

(Being 0·002 in. greater than that in the same month on an average of the preceding 13 years.)

**WIND** ..

| | | |
|---|---|---|
| Greatest Pressure... | 18·6 lbs. | ... On the 8th. |
| Mean Pressure ... | 0·9 lb. | |
| Number of Days Calm ... | 0 | |
| Prevailing Direction ... | N.E. | |

(Prevailing direction during the same month for the preceding 13 years N.E. and S.

**TEMPERATURE**

| | | |
|---|---|---|
| Highest in the Shade ... | 80·9 | ... On the 29th. |
| Lowest in the Shade ... | 53·2 | ... On the 13th and 15th. |
| Greatest Range ... ... | 16·9 | ... On the 15th. |
| Highest in the Sun ... | 121·5 | ... On the 29th. |
| Highest in a Black Box with Glass Top ... ... | 234·0 | ... On the 29th. |
| Lowest on the Grass ... | 47·5 | ... On the 1st. |
| Mean Diurnal Range ... | 11·7 | |
| Mean in the Shade ... | 67·3 | |

(Being 0·9 greater than that of the same month on an average of the preceding 13 years.)

**HUMIDITY** ..

| | | |
|---|---|---|
| Greatest Amount... ... | 99·0 | ... On the 22nd. |
| Least ... ... ... | 39·0 | ... On the 11th. |
| Mean ... ... ... | 78·7 | |

(Being 9·8 greater than that of the same month on an average of the preceding 13 years.)

**RAIN** ..

| | | |
|---|---|---|
| Greatest Fall ... ... | 1·058 inch. | On the 28th. |
| Number of Days ... ... | 14 rain and 3 dew. | |
| Total Fall ... ... | 2·626 inches. | 65 ft. above the ground. |
| | 3·290 inches. | 15 inches above the ground |

(Being 0·021 inch greater than that of the same month on an average of the preceding 13 years.)

**EVAPORATION** Total Amount ... ... 5·237 inches.

**OZONE** .. .. Mean Amount ... ... 6·2

(Being 1·5 greater than that in the same month on an average of the preceding 12 years.)

**ELECTRICITY** .. Number of Days Lightning 11

**CLOUDY SKY** ..

| | |
|---|---|
| Mean Amount ... ... | 7·3 |
| Number of Clear Days ... | 0 |

**METEORS** .. Number Observed ... 0

### REMARKS.

The weather during the month was unusually cloudy and wet, while the temperature was only 0·9 greater than the average of past years for this month, but the sun's heating power is in this case scarcely represented by the mean temperature, for while during the summer 71-72 the Black Box thermometer never exceeded 204, during the past month it rose to 234·5. To this excessive heating power the large rainfall and great number of thunderstorms are probably due; only five days, viz., 8th, 13th, 14th, 16th, and 17th being without thunderstorms, and the total number 144. On the 27th storms were recorded at 16 different stations; much of the excessive rainfall, especially inland, fell in these storms.

The rainfall varied from 10½ inches to a little under 2 inches, the mean for the inland stations being 5 inches, and the coast stations 4½ inches.

A shock of earthquake was felt at Kiandra and Cooma on the 17th.

## SYDNEY, NOVEMBER, 1872.

| Date. | Moon's Phases. | Standard Barometer at 9 a.m., corrected to Mean Sea Level. | Wind. | | Temperature. | | | | | | | | | Humidity. 0-100. | Rain. | Cl. Sk. 0-1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Dry. | Wet. | Shade. | | | | Sun. | Grass. | Sea Water. 9 a.m. | | | |
| | | | Prevailing Direction. | Total Velocity. Miles. | Mean 9.3.9. | Mean 9.3.9. | Max. | Min. | Range | Mean. | Max. | Min. | | Mean 9.3.9. | Inches. | Tak at S & 9 |
| 1 | New Moon | 30·285 | E. | 162 | 63·7 | 57·6 | 70·1 | 55·0 | 15·1 | 62·6 | 111·9 | 47·5 | 64·9 | 67·0 | 0·001 | 4 |
| 2 | | ·297 | N.E. | 200 | 63·6 | 58·6 | 69·0 | 58·8 | 10·2 | 63·9 | 108·5 | 51·1 | 65·1 | 71·7 | ·0 | 10 |
| 3 | | ·286 | N.N.E. | 167 | 60·8 | 60·0 | 70·3 | 59·8 | 10·5 | 65·1 | 106·9 | 54·6 | 65·0 | 94·0 | 0·066 | 10 |
| 4 | | ·242 | N.E. | 304 | 66·8 | 59·9 | 71·4 | 56·7 | 14·7 | 64·1 | 114·1 | 49·1 | 65·3 | 64·7 | ·0 | 3 |
| 5 | | ·181 | N.E. | 302 | 66·0 | 61·6 | 70·9 | 56·1 | 14·8 | 63·5 | 112·1 | 49·0 | 65·1 | 75·7 | 0·001 | 3 |
| 6 | G. S. Dec. | ·086 | N.N.W. | 131 | 66·0 | 62·9 | 73·7 | 60·7 | 13·0 | 67·2 | 116·0 | 55·5 | 65·6 | 82·3 | ·0 | 6 |
| 7 | Perigee | ·033 | N.E. | 320 | 67·7 | 64·7 | 74·1 | 58·1 | 16·0 | 66·1 | 114·3 | 51·3 | 65·3 | 82·3 | 0·140 | 0 |
| 8 | First Qr. | 29·905 | N.N.E. | 512 | 70·7 | 66·2 | 75·7 | 62·1 | 13·6 | 68·9 | 114·6 | 55·4 | 65·9 | 76·7 | 0·002 | 7 |
| 9 | | ·855 | N.N.E. | 419 | 70·7 | 66·7 | 76·8 | 64·6 | 12·2 | 70·7 | 118·1 | 58·4 | 66·2 | 78·3 | ·0 | 9 |
| 10 | | ·749 | N.N.E. | 255 | 69·0 | 66·0 | 73·5 | 64·6 | 8·9 | 69·1 | 114·0 | 59·8 | 65·9 | 83·0 | ·0 | 10 |
| 11 | | ·634 | W. | 435 | 67·8 | 58·1 | 76·8 | 60·6 | 16·2 | 68·7 | 119·9 | 54·7 | 66·1 | 55·0 | 0·790 | 3 |
| 12 | In Equat. | ·994 | S. | 489 | 60·4 | 55·1 | 66·8 | 57·1 | 9·7 | 62·0 | 109·0 | 51·9 | 66·5 | 70·3 | ·0 | 7 |
| 13 | | 30·280 | S. | 342 | 58·6 | 53·7 | 62·4 | 53·2 | 9·2 | 57·8 | 103·4 | 48·0 | 66·2 | 70·7 | 0·200 | 7 |
| 14 | | ·295 | E.S.E. | 160 | 61·3 | 56·3 | 67·0 | 53·6 | 13·4 | 60·3 | 108·4 | 49·0 | 66·4 | 71·3 | 0·210 | 4 |
| 15 | Full Moon | ·165 | N.N.E. | 243 | 65·8 | 61·1 | 70·1 | 53·2 | 16·9 | 61·7 | 110·7 | 47·8 | 66·7 | 74·3 | 0·001 | 2 |
| 16 | | ·114 | N.E. | 469 | 68·2 | 64·1 | 72·6 | 55·9 | 16·7 | 64·3 | 112·6 | 50·2 | 66·5 | 77·3 | 0·001 | 0 |
| 17 | | ·244 | S. | 234 | 61·4 | 57·6 | 64·8 | 60·2 | 4·6 | 62·5 | 78·6 | 52·7 | 66·3 | 77·0 | ·0 | 10 |
| 18 | | ·209 | N.E. | 257 | 64·5 | 60·2 | 69·0 | 58·6 | 10·4 | 63·8 | 108·7 | 54·8 | 66·7 | 76·3 | ·0 | 9 |
| 19 | G. N. Dec. | ·098 | E.N.E. | 231 | 67·5 | 66·1 | 74·1 | 62·5 | 11·6 | 68·3 | 108·5 | 58·3 | 66·5 | 91·7 | 0·002 | 10 |
| 20 | | ·070 | E.N.E. | 342 | 70·6 | 68·4 | 74·5 | 65·2 | 9·3 | 69·9 | 101·0 | 59·9 | 66·4 | 88·0 | 0·002 | 10 |
| 21 | | ·010 | N.E. | 594 | 67·9 | 65·5 | 69·1 | 67·1 | 2·0 | 68·1 | 78·9 | 62·5 | 66·7 | 86·0 | 0·089 | 10 |
| 22 | Apogee | 29·839 | N.N.E. | 222 | 65·3 | 64·1 | 73·1 | 62·9 | 10·2 | 68·0 | 106·7 | 58·1 | 66·2 | 93·3 | 0·225 | 9 |
| 23 | Last Qr. | ·822 | N.E. | 279 | 69·4 | 67·0 | 74·7 | 64·6 | 10·1 | 69.7 | 117·0 | 58·1 | 66·4 | 86·3 | 0·497 | 6 |
| 24 | | ·929 | E.N.E. | 198 | 71·6 | 68·3 | 77·1 | 65·9 | 11·2 | 71·5 | 119·9 | 60·1 | 66·7 | 82·0 | ·0 | 10 |
| 25 | | ·932 | S. | 217 | 71·9 | 69·1 | 77·4 | 67·1 | 10·3 | 72·3 | 114·8 | 62·4 | 67·1 | 85·0 | ·0 | 5 |
| 26 | In Equat. | ·949 | N.E. | 313 | 72·8 | 69·9 | 79·8 | 67·2 | 12·6 | 73·5 | 117·2 | 62·3 | 67·3 | 84·3 | ·0 | 10 |
| 27 | | ·792 | N.E. | 316 | 74·3 | 70·4 | 80·1 | 68·7 | 11·4 | 74·4 | 118·0 | 65·4 | 67·7 | 79·7 | ·0 | 10 |
| 28 | | ·698 | N.E. | 242 | 74·0 | 71·5 | 79·6 | 69·5 | 10·1 | 74·6 | 113·9 | 65·1 | 67·9 | 87·0 | 1·058 | 10 |
| 29 | | ·861 | S. | 226 | 73·5 | 67·9 | 80·9 | 65·3 | 15·6 | 73·1 | 121·5 | 57·1 | 68·3 | 72·7 | 0·005 | 10 |
| 30 | | 30·067 | E. | 245 | 70·9 | 66·8 | 77·2 | 67·5 | 9·7 | 72·4 | 120·1 | 62·4 | 68·9 | 77·7 | ·0 | 10 |
| Means | ..... | 30·031 | N.E. | 8826 | 67·4 | 63·5 | 73·1 | 61·4 | 11·7 | 67·3 | 110·6 | 55·8 | 66·4 | 78·7 | Sum. 3·290 | 7 |

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.
The Barometer at 9 a.m. reads 0·024 above the true mean for the day.
Heavy dew 1st, 8th, and 16th.

## SYDNEY, NOVEMBER, 1872.

| Date. | Evaporation. Inches. | Ozone, 0-10. Day. | Night. | Mean. | Remarks. |
|---|---|---|---|---|---|
| 1 | 0·212 | 4·5 | 5·0 | 4·8 | 1.—Cloudy until noon. Atmosphere clear in the afternoon. |
| | | | | | 2.—Cloudy and very dull all day, like rain. |
| 2 | 0·124 | 5·0 | 5·5 | 5·3 | 3.—Light steady rain until 9·15 a.m., and at intervals until 11 a.m. Clouds cleared after 3 p.m. |
| 3 | 0·100 | ... | ... | 4·0 | 4.—Cloudy until noon. Very dry fresh breeze all day. |
| 4 | 0·287 | 5·0 | 5·5 | 5·3 | 5.—Cloudy until after 2 p.m., and again after 3 p.m. until 7 p.m. Light thunderstorm, W., 3·17 p.m., until after 4 p.m. Drops of rain, 5·14 p.m. Lightning, W., after 8·25 p.m. |
| 5 | 0·202 | 5·5 | 7·0 | 6·3 | 6.—Cloudy until 8·45 p.m. Thunderstorm from W., at 12·0 p.m., with lightning and rain; ended at 2·30 p.m. on the coast. Lightning all morning until daybreak. |
| 6 | 0·124 | 8·0 | 6·5 | 7·3 | 7.—Fine. Fresh breeze blowing. Dew falling in the evening. |
| 7 | 0·234 | 6·5 | 7·0 | 6·8 | 8.—Fine until after 2 p.m. Very strong dry breeze during day. Warm. Lunar ring at 9 p.m. |
| 8 | 0·286 | 5·5 | 8·0 | 6·8 | 9.—Cloudy and warm. Thunderstorm from W.S.W., 4·14 p.m. until after 5 p.m. Lightning W.S.W. at 4·28 p.m. |
| 9 | 0·210 | 6·0 | 8·0 | 7·0 | 10.—Cloudy. Thunderstorm, S.W., 2 51 p.m. Lightning, 3·21 p.m. Drops of rain, 11·16 a.m. and during storm. Very heavy rain, 3·40 p.m. |
| 10 | 0·100 | ... | ... | 4·5 | 11.—Cloudy and fine alternately. Like thunderstorm, S.W., all afternoon, with strong dry breeze. Lightning from E. to S. all evening. Electrometer, 0 to 33, all evening. |
| 11 | 0·388 | 3·5 | 5·5 | 4·5 | 12.—Morning fine and cool. Afternoon and evening cold, stormy, and showery. |
| 12 | 0·122 | 8·0 | 8·5 | 8·3 | 13.—Cloudy and fine alternately. Showery until evening, and strong cold breeze. |
| | | | | | 14.—Cloudy and showery until 2·30 p.m. Lunar halos frequent during evening. |
| 13 | 0·138 | 8·0 | 7·0 | 7·5 | 15.—Morning cloudy. Light dew falling in the evening. Warm throughout day. |
| | | | | | 16.—Fine, warm. Dense fog at daylight until 7 a.m. Strong dry breeze during day. |
| 14 | 0·153 | 4·5 | 7·0 | 5·8 | 17.—Cloudy and very dull all day. Light rain at 9·10 a.m., and 10·56 a.m. S. gale at 3·30 a.m. |
| 15 | 0·247 | 5·0 | 6·5 | 5·8 | 18.—Fine from 12·30 p.m. until after 1 p.m. Fine again towards evening. Turned cloudy after 8·30 p.m., and fresh in the afternoon. |
| 16 | 0·276 | 5·5 | 8·0 | 6·8 | 19.—Cloudy. Thunderstorm from N.E. at 7 p.m. Rain from 8·52 p.m. until 9·10 p.m., also light rain in the morning. Storm over at 8·25 p.m. Lightning all round. |
| 17 | 0·102 | ... | ... | 3·3 | 20.—Cloudy, very dull. Morning sultry. Light showers at 5·47 p.m., and 6·43 p.m., and light rain during evening. Lightning S.S.W. and N.E., 7·56 p.m., and during evening. |
| 18 | 0·166 | 3·5 | 6·0 | 4·8 | |
| 19 | 0·104 | 5·0 | 7·5 | 6·3 | 21.—Cloudy and very dull. Forenoon showery. Dropping rain at 8·52 p.m. Strong breeze during the day. |
| 20 | 0·105 | 6·5 | 9·0 | 7·8 | 22.—Cloudy and dull. Steady rain all morning. Raining heavily at 9 a.m. Ceased raining at 11·15 a.m., until 5·3 p.m. Light rain all evening. |
| 21 | 0·073 | 8·5 | 9·0 | 8·8 | 23.—Fine from 8·45 p.m. until 9·45 p.m. Forenoon stormy and dropping rain. Light thunderstorm from N.W. at 1·15 p.m. Light rain, 4·22 p.m., and after 6 p.m. Lightning, N.E., at 9·48 p.m. |
| 22 | 0·031 | 9·0 | 7·0 | 8·0 | |
| 23 | 0·178 | 9·0 | 8·5 | 8·8 | 24.—Fine from noon until about 2 p.m. Warm. |
| 24 | 0·198 | ... | ... | 4·5 | 25.—Forenoon fine until 1·30 p.m., and again after 8 p.m. Light thunderstorm, W.S.W., at 2·2 p.m., until 3·30 p.m. Lightning in the evening after 8·32 p.m., S. Very warm. |
| 25 | 0·180 | 7·0 | 5·5 | 6·3 | 26.—Cloudy and very warm. Light clouds until evening, when it became dull and looked like rain. |
| 26 | 0·200 | 6·0 | 6·5 | 6·3 | 27.—Cloudy and very warm all forenoon. Light thunderstorm, N.W., 2·50 p.m., disappeared towards S. At 3 p.m. a heavy thunderstorm from N.W., with rain. Lightning 3·59 p.m. Storm over at 5·30 p.m. |
| 27 | 0·168 | 4·5 | 4·0 | 4·3 | |
| 28 | 0·141 | 6·0 | 6·5 | 6·3 | 28.—Cloudy and dull. Steady rain from 6·10 a.m. until 9·40 a.m. Very warm. Like thunderstorm, W., in the evening. Lightning from S.S.E. to N.W. all evening. |
| 29 | 0·222 | 5·0 | 8·5 | 6·8 | 29.—Cloudy and very warm. Heavy clouds during the day, like thunderstorm. Dropping rain at 8·34 p.m. |
| 30 | 0·166 | 5·0 | 7·5 | 6·3 | 30.—Cloudy and dull, fresh breeze until evening. Forenoon very warm. Dew falling in the evening. |
| Sum. | | | | | |
| Means | 5·237 | 6·0 | 6·9 | 6·2 | |

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.

Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

## SYDNEY, NOVEMBER, 1872.

| Date. | Self-registering Barometer at 32°. | | | | | Self-registering Anemometer. | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mean. | Max. | Hour. | Min. | Hour. | S. | S.S.W. | S.W. | W.S.W. | W. | W.N.W. | N.W. | N.N.W. | N. | N.N.E. | N.E. | E.N.E. | E. | E.S.E. | S.E. | S.S.E. | Velocity. Total. Miles. | Velocity. Mean. pr. hr. | Mean Pressure. lbs. | Greatest Pressure. Direction of Wind. Time. |
| 1 | 30·245 | 30·287 | 9 p.m. | 30·205 | 4 p.m. | ... | ... | 1 | ... | ... | 1 | ... | .. | ... | ... | ... | ... | 22 | ... | ... | ... | 162 | 6·8 | 0·2 | 1·3 E. 5·13 p.m. |
| 2 | 30·257 | 30·296 | 10 a.m. | 30·230 | 4p.m&4a.m. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 11 | 5 | 8 | ... | ... | ... | 200 | 8·3 | 0·4 | 1·8 E.N.E. 5·15 p.m. |
| 3 | 30·078 | 30·125 | 9 a.m. | 30·040 | 5 p.m. | ... | ... | ... | ... | ... | ... | ... | ... | ... | 9 | 5 | 3 | 6 | 1 | ... | ... | 167 | 7·0 | 0·3 | 5·6 E.N.E. 5·23 p.m. |
| 4 | 30·021 | 30·090 | 9 a.m. | 29·985 | 5 p.m. | ... | ... | ... | ... | ... | ... | ... | 3 | 1 | 8 | 12 | ... | ... | ... | ... | ... | 304 | 12·7 | 0·8 | 5·4 N.E. 4·45 p.m. |
| 5 | 29·952 | 30·015 | 9 a.m. | 29·900 | 4 a.m. | ... | ... | ... | ... | ... | ... | ... | ... | 3 | 7 | 11 | 3 | ... | ... | ... | ... | 302 | 12·6 | 0·8 | 4·8 N.E. 3·17 p.m. |
| 6 | 29·880 | 29·945 | 9 a.m. | 29·835 | 2 & 3 a.m. | ... | ... | ... | ... | ... | 1 | 2 | 10 | 3 | 4 | ... | 2 | 2 | ... | ... | ... | 131 | 5·5 | 0·2 | 1·6 W.N.W. 2· 0 p.m. |
| 7 | 29·801 | 29·895 | 9 a.m. | 29·755 | 3 & 4 a.m. | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 10 | 7 | 6 | ... | ... | ... | 320 | 13·3 | 0·9 | 4·8 N.E. 7·18 p.m. |
| 8 | 29·689 | 29·770 | 9 a.m. | 29·645 | 5 p.m. | ... | ... | ... | 1 | ... | ... | 1 | ... | 1 | 15 | 4 | 2 | ... | ... | ... | ... | 512 | 21·3 | 2·3 | 18·6 N.N.E. 8·25 p.m. |
| 9 | 29·621 | 29·675 | 4 a.m. | 29·588 | 8 a.m. | ... | ... | ... | ... | ... | ... | ... | ... | 3 | 12 | 6 | 2 | 1 | ... | ... | ... | 419 | 17·5 | 1·5 | 5·4 N.N.E. 7·27 p.m. |
| 10 | 29·476 | 29·589 | 9 a.m. | 29·420 | 2 & 4 p.m. | 1 | ... | 1 | 1 | 1 | 3 | ... | ... | ... | 11 | 4 | 1 | 1 | ... | ... | ... | 255 | 10·6 | 0·6 | 4·8 S. 3·42 p.m. |
| 11 | 29·585 | 29·790 | 8 a.m. | 29·430 | 11 a.m. | 1 | ... | 2 | 5 | 14 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 435 | 18·1 | 1·6 | 9·2 W.S.W. 12·25 p.m. |
| 12 | 29·960 | 30·089 | 8 a.m. | 29·822 | 9 a.m. | 12 | 7 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 489 | 20·4 | 2·1 | 6·8 S. 4·33 p.m. |
| 13 | 30·105 | 30·137 | 9 p.m. | 30·067 | 3 & 4 p.m. | 12 | 4 | 4 | 3 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 342 | 14·3 | 1·0 | 5·8 S. 2·10 p.m. |
| 14 | 30·038 | 30·122 | 9 a.m. | 29·980 | 4 a.m. | 1 | 1 | ... | ... | 2 | ... | ... | 6 | 1 | ... | ... | ... | 5 | 6 | 2 | ... | 160 | 6·7 | 0·2 | 0·6 S.E. 1· 0 p.m. |
| 15 | 29·928 | 30·003 | 10 a.m. | 29·888 | 4 & 5 p.m. | ... | ... | ... | ... | 1 | ... | ... | ... | 3 | 9 | 2 | 4 | 5 | ... | ... | ... | 243 | 10·1 | 0·5 | 2·2 E.N.E. 3·45 p.m. |
| 16 | 29·904 | 30·042 | 8 a.m. | 29·820 | 4 p.m. | 4 | 2 | ... | ... | ... | ... | ... | ... | 1 | 7 | 7 | 2 | 1 | ... | ... | ... | 469 | 19·6 | 1·9 | 11·0 S.S.W. 5· 0 a.m. |
| 17 | 30·064 | 30·097 | 8 & 9 p.m. | 30·037 | 4 & 5 a.m. | 9 | 1 | ... | 3 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | 6 | 234 | 9·8 | 0·5 | 4·2 S. 10·30 a.m. |
| 18 | 29·940 | 30·042 | 10 a.m. | 29·900 | 4 p.m. | ... | ... | ... | ... | ... | ... | 5 | ... | ... | 1 | 11 | 5 | 1 | ... | 1 | .. | 257 | 10·7 | 0·6 | 3·4 N.E. 3·45 p.m. |
| 19 | 29·873 | 29·929 | 9 a.m. | 29·803 | 4 p.m. | ... | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | 20 | 2 | ... | ... | ... | 231 | 9·6 | 0·5 | 3·6 E.N.E. 3·37 p.m. |
| 20 | 29·863 | 29·908 | 9 a.m. | 29·823 | 2 a.m. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 19 | 5 | ... | ... | ... | 342 | 14·3 | 1·0 | 3·9 E.N.E. 8·12 a.m. |
| 21 | 29·724 | 29·845 | 10 a.m. | 29·612 | 3 a.m. | ... | ... | ... | ... | ... | ... | ... | ... | ... | 10 | 12 | 2 | ... | ... | ... | ... | 594 | 24·8 | 3·1 | 12·5 N.N.E. 8·20 a.m. |
| 22 | 29·639 | 29·693 | 10 a.m. | 29·605 | 3 p.m. | ... | ... | ... | ... | 1 | ... | ... | ... | 5 | 12 | ... | ... | 3 | 2 | 1 | ... | 222 | 9·3 | 0·4 | 2·6 N.N.E. 6·48 p.m. |
| 23 | 29·787 | 29·771 | 8 a.m. | 29·634 | 1 & 3 p.m. | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 4 | 11 | 2 | 4 | 2 | ... | ... | 279 | 11·6 | 0·7 | 5·8 N.E. 3· 0 p.m. |
| 24 | 29·749 | 29·781 | 7 a.m. | 29·716 | 3 p.m. | ... | ... | ... | ... | ... | ... | ... | ... | 3 | 1 | 3 | 9 | 8 | ... | ... | ... | 198 | 8·3 | 0·3 | 1·3 E. 2·35 p.m. |
| 25 | 29·739 | 29·790 | 8 a.m. | 29·690 | 3 p.m. | 9 | .. | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 6 | 5 | ... | 2 | 1 | 217 | 9·0 | 0·4 | 1·4 E. 1·45 p.m. |
| 26 | 29·691 | 29·782 | 9 a.m. | 29·631 | 2,3,& 4 a.m. | 1 | 2 | ... | ... | ... | ... | ... | ... | ... | 6 | 10 | 2 | 3 | ... | ... | ... | 313 | 13·0 | 0·9 | 3·6 N.E. 7·12 p.m. |
| 27 | 29·527 | 29·624 | 9 a.m. | 29·470 | 2 a.m. | ... | ... | ... | 1 | ... | ... | 3 | ... | 2 | 6 | 9 | 3 | ... | ... | ... | ... | 316 | 13·2 | 0·9 | 6·1 N.N.E. 3· 7 p.m. |
| 28 | 29·523 | 29·677 | 8 a.m. | 29·421 | 4 & 5 p.m. | ... | ... | 1 | 1 | 3 | 5 | 2 | 1 | 3 | 3 | 5 | ... | ... | ... | ... | ... | 242 | 10·1 | 0·5 | 5·1 S.W. 10·30 p.m. |
| 29 | 29·776 | 29·899 | 8 a.m. | 29·679 | 1 p.m. | 9 | ... | 1 | 1 | ... | ... | ... | 1 | ... | ... | ... | 2 | 7 | 1 | ... | 2 | 226 | 9·4 | 0·4 | 2·6 E. 2·16 p.m. |
| 30 | 29·893 | 29·931 | 9 p.m. | 29·859 | 4 a.m. | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 5 | 5 | 4 | 3 | 245 | 10·2 | 0·5 | 1·8 E.S.E. 3· 7 p.m. |
| Sums or Means. | 29·844 | Nov. 2nd. 30·296 | 10 a.m. | Nov. 10th. 29·420 | 2 & 4 p.m. | 64 | 17 | 13 | 16 | 25 | 12 | 15 | 22 | 31 | 125 | 133 | 103 | 100 | 17 | 13 | 14 | Sum 8826 | Mean. 12·3 | Mean. 0·9 | |

The self-registering Barometer is worked by electricity, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour.

# ABSTRACT FROM METEOROLOGICAL STATIONS,

## For the Month of NOVEMBER, 1872.

| Stations. | Least Distance from East Coast in miles. | Height above sea in feet. | Mean of Observations taken at 9 a.m., November, 1872. | | | | | | | | | | For 24h. previous to 9 a.m. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Barometer. | Temperature in Shade. | Humidity 0 to 100. | Wind. | | Clouds 0-10. | Temperature in Shade. | | | | Rain. | | | | Evaporation in inches. |
| | | | | | | Direction | Force. 0-6 | | Mean. Max. | Mean. Min. | Extreme Max. | Extreme Min. | Total Fall, inches. | No. of Days | Greatest Fall, inches. | Date | |
| Tenterfield ... | 80 | ... | ... | ... | ... | N.E. | 1·1 | 4·6 | 79·2 | ... | 86·1 | ... | 8·780 | 10 | 3·100 | 13 | 1·208 |
| Grafton ..... | 22 | ... | ... | 68·4 | ... | S.E. | 0·3 | 6 6 | 78·8 | 58·0 | 92·2 | 47·7 | 3·810 | 9 | 0·650 | 11 | 3 344 |
| Bourke ..... | 393 | ... | ... | 75·2 | ... | N.E. | 0·0 | 1·6 | 85·1 | 65·3 | 93·4 | 48·9 | 2·010 | 3 | 1 780 | 21 | ... |
| Narrabri ..... | 196 | ... | ... | 75·6 | ... | W.N.W. | 1·4 | 1·6 | 88·8 | 62·3 | 103·9 | 50·5 | 3·170 | 3 | 2·030 | 11 | 6·458 |
| Armidale..... | 80 | 3278 | 30·055 | 59·1 | 77·0 | W. | 1 8 | 3·9 | 64·0 | 54·2 | 76·2 | 40·1 | 1·880 | 5 | 0·900 | 6 | ... |
| Port Macquarie | 0 | ... | ... | 67·5 | ... | N.E. | 1·7 | 4·6 | 74·5 | 60·4 | 82·3 | 52·2 | 5·355 | 10 | 1·340 | 23 | 5·951 |
| Murrurundi ... | 94 | 1545 | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Cassilis ..... | 120 | ... | ... | 69·1 | ... | W. | 0·4 | 2·1 | 82·3 | 55·9 | 91·1 | 41·2 | 4·630 | 8 | 1·800 | 22 | ... |
| Muswellbrook.. | 68 | 475 | ... | 72·1 | ... | N.W. | 1·8 | ... | 86·6 | 57·5 | 99·5 | 43·3 | 4·120 | 8 | 1·080 | * | 5·074 |
| Dubbo ..... | 182 | ... | ... | 71·4 | ... | N.E. | 0·6 | ... | 81·2 | 61·5 | 91·9 | 49·9 | 4·560 | 13 | 1·300 | 22 | 6·355 |
| Mudgee ..... | 121 | ... | ... | 68·4 | ... | S.E. | 0·3 | ... | 79·4 | 57·3 | 90·4 | 45·0 | 4·680 | 7 | 1·900 | 22 | ... |
| Dalwood ..... | 27 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 1·370 | 11 | ... | ... | ... |
| West Maitland | 18 | ... | ... | 64·9 | ... | W. | 0·8 | 5·4 | 80·8 | 49·0 | 95·6 | 50·4 | 2·670 | 5 | 1·030 | 11 | 4·905 |
| Lambton ..... | 7 | ... | ... | 64·1 | ... | N.E. | 1·1 | ... | 76·1 | 52·1 | 84·3 | 43·0 | 2·870 | 8 | 0·820 | 23 | 4·285 |
| Newcastle ..... | 1 | 112 | 29·995 | 66·8 | 77·0 | N.E. | 0·1 | 4·2 | 73·1 | 60·4 | 82·8 | 51·3 | 2·560 | 8 | 1·100 | 13 | ... |
| Orange..... | 124 | 2891 | ... | 62·3 | ... | N.E. | 1·8 | ... | 72·2 | 52·4 | 82·2 | 38·7 | 7·680 | 17 | 1·740 | 22 | 3·745 |
| Bathurst ..... | 96 | 2200 | 29·956 | 64·5 | 77·0 | W. | 1·1 | 7·0 | 79·2 | 49·7 | 89·5 | 36·0 | 8·840 | 11 | 3·300 | 28 | ... |
| Kurrajong ..... | 36 | 1870 | ... | 60·1 | ... | E. | ... | ... | 66·8 | 53·3 | 80·0 | 43·0 | 6·030 | 15 | 1·250 | 20 | ... |
| Mount Victoria | 61 | 3490 | 29·971 | 62·2 | 74·0 | W. | 0·0 | 6·3 | 74·9 | 49·4 | 84·1 | 36·9 | 9·570 | 16 | 3·400 | 22 | 3·840 |
| Woodford ..... | 50 | 2192 | 29·960 | 61·9* | ... | E. | 0·0 | ... | 67·5 | 56·3 | 78·5 | 44·4 | 10·530 | 16 | 2·450 | 21 | ... |
| Parramatta..... | 16 | ... | ... | 71·9 | ... | N. | 1·0 | 6·4 | 83·7 | 60·0 | 97·0 | 43·2 | 3·610 | 11 | 0·790 | 21 | ... |
| Sydney..... | 5 | 155 | 30·031 | 67·3 | 78·7 | N.E. | 0·9 | 7·3 | 73·1 | 61·4 | 80·9 | 53·2 | 3·290 | 14 | 1·058 | 28 | 5·237 |
| Liverpool..... | 16 | ... | 30·021 | 67·9 | ... | S.W. | 0·3 | 6·0 | 76·6 | 59·1 | 87·0 | 46·0 | 4·441 | 14 | 1·580 | 22 | ... |
| Wentworth..... | 476 | ... | ... | 72·7 | ... | S.W. | 2·0 | 5·1 | 84·8 | 60·5 | 103·3 | 46·5 | 2·520 | 12 | 0·480 | 9 | 7·344 |
| Wilton ..... | 13 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 7·480 | 11 | 1·920 | 22 | ... |
| Cordeaux River | 6 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 5·810 | 14 | 1·730 | 22 | ... |
| Young ..... | 140 | ... | ... | 68·5 | ... | E.S.E. | 0·9 | ... | 83·6 | 53·3 | 98·0 | 40 1 | 4·040 | 7 | 1·170 | 22 | 5·621 |
| Wollongong ... | 0 | ... | ... | 66·3 | ... | N.E. | 1·4 | ... | 74·0 | 58·5 | 81·4 | 49·7 | 4·920 | 5 | 1·560 | 22 | ... |
| Moss Vale ..... | 31 | ... | ... | 62·8 | ... | E. | 0·8 | ... | 71·2 | 54·4 | 82·4 | 40·8 | 10·350 | 13 | 3·020 | 22 | ... |
| Goulburn..... | 54 | 2129 | 30·019 | 61·8 | 80·0 | W. | 0·0 | 6·0 | 76·9 | 46·7 | 89·2 | 32·8 | 7·050 | 14 | 2·860 | 22 | 4·418 |
| Terrara..... | 4 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 5·950 | 10 | 2·350 | 21 | ... |
| Wagga Wagga | 161 | ... | ... | 67·8 | ... | N.E. | 1·3 | ... | 77·6 | 58·0 | 89·1 | 47·9 | 3·170 | 7 | 0·930 | 28 | 4·807 |
| Cape St. George | 0 | 175 | 29·972 | 65·0 | 80·0 | N.E. | 1 1 | 5·6 | 72·5 | 57·4 | 83·2 | 45·6 | 5·990 | 11 | 0·980 | 21 | ... |
| Queanbeyan ... | 60 | ... | ... | 62·3 | ... | N.W. | 0·3 | ... | 70·2 | 54·3 | 79·2 | 38·1 | 5·130 | 12 | 1·100 | 28 | 3·680 |
| Urana ..... | 218 | ... | ... | 72·0 | ... | W. | 0·4 | 4·6 | 86·0 | 57·9 | 96·5 | 47·1 | 3·170 | 8 | 1·020 | 21 | 6·242 |
| Deniliquin ..... | 287 | 410 | 30·047 | 64·0 | 65·0 | S.W. | 1·5 | 3·3 | 86·7 | 41·3 | 100·6 | 33·2 | 2·970 | 13 | 0·650 | † | ... |
| Kiandra ..... | 88 | 4640 | 29·965 | 51 1 | 69·0 | N.W. | 0.4 | 6·0 | 64 8 | 37·3 | 75·1 | 23·3 | 6·120 | 18 | 1·560 | 27 | ... |
| Cooma ..... | 52 | 2637 | ... | 62·6 | ... | N.N.E. | 2·2 | 6·1 | 77·3 | 47·9 | 88·6 | 30·8 | 3·060 | 14 | 0·460 | 22 | 2·887 |
| Albury ..... | 175 | 572 | ... | 68·6 | 70·0 | N.W. | 0·8 | 3·8 | 84·3 | 52·8 | 97·4 | 42·3 | 2·080 | 7 | 0·710 | 28 | ... |
| Eden..... | 0 | 107 | 29·976 | 63·9 | 77·0 | N.E. | 1·3 | 6·9 | 69·8 | 58·0 | 75·0 | 47·1 | 3·210 | 14 | 0·900 | 22 | ... |

* 10th and 29th. † 20th and 22nd.

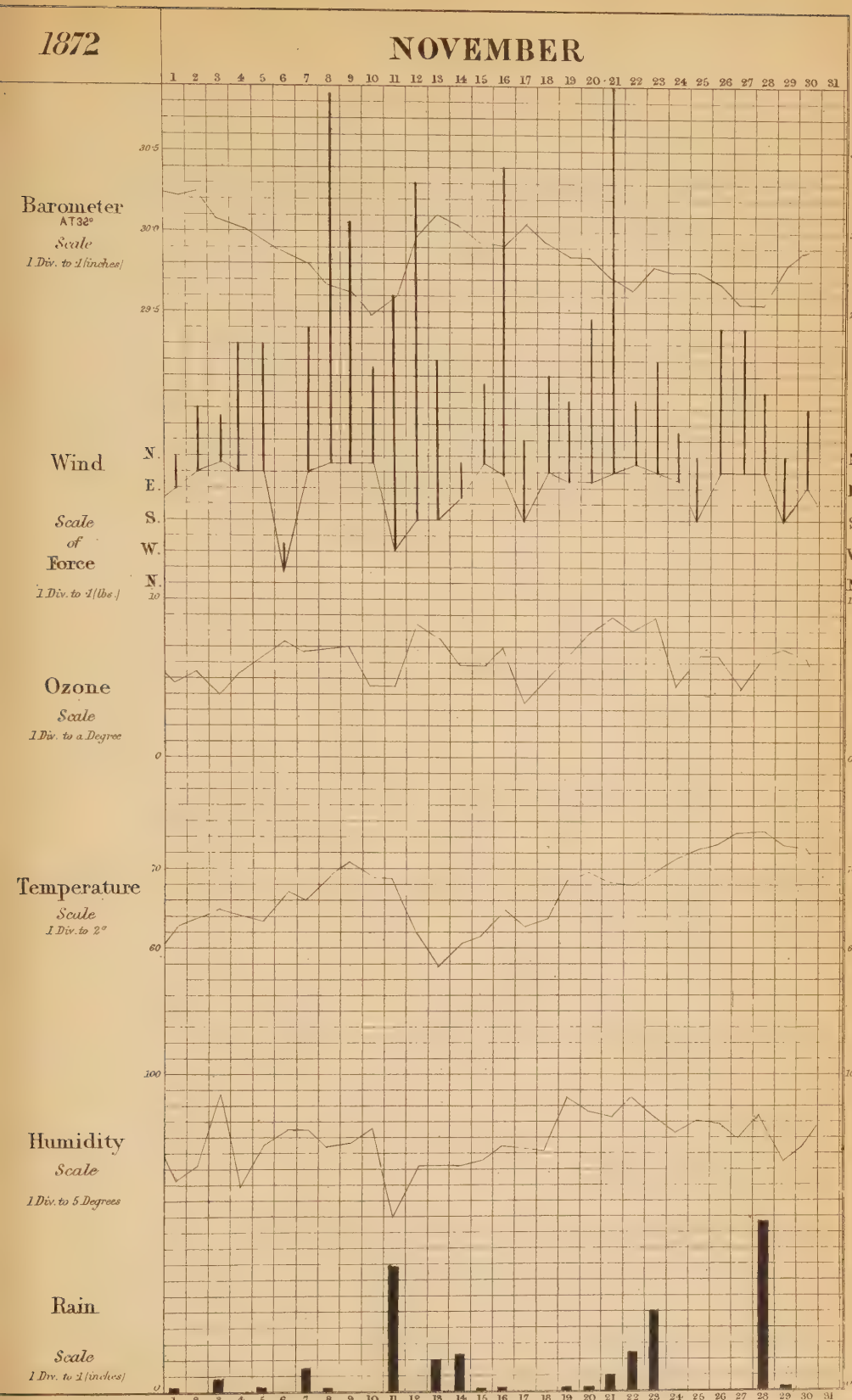
Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only twelve of the stations have barometers.

REMARKS.

## REMARKS.

Bourke—Thunderstorms, 3rd and 26th; gale, 10th; grass abundant.
Narrabri—Swarms of grasshoppers during month.
Armidale—Thunderstorms, 15th and 18th.
Port Macquarie—Stormy, 5th, 6th, 7th, and 19th; thunderstorms, 22nd, 23rd, 24th, 25th, 26th, 27th, and 30th.
Cassilis—Thunderstorms, 3rd, 6th, 10th, 12th, 20th, 21st, 26th, and 27th.
Muswellbrook—Thunderstorms, 6th, 9th, 12th, 20th 23rd, and 27th; and foggy, 7th.
Dubbo—Stormy, 5th and 6th.
Mudgee—Violent thunderstorm, 21st; hot, 8th and 25th.
West Maitland—Thunderstorm, 5th; stormy, 25th, 26th, and 27th; hot during month.
Lambton—Thunderstorms, 9th, 11th, 22nd, 23rd, 27th, and 28th; thunder, 7th and 26th.
Newcastle—Moderate sea, 12th, and rising, 13th.
Orange—Thunderstorms, 2nd, 4th, 5th, 6th, 10th, 20th, 21st, 26th, 27th, 28th, and 30th.
Bathurst—Thunderstorm, 6th.
Kurrajong—Thunder and thunderstorms, 5th, 6th, 7th, 9th, 10th, 19th, 20th, 23rd, 25th, 27th, and 28th.
Mount Victoria—Thunderstorms, 2nd, 4th, 5th, 6th, 7th, 9th, 10th, 18th, 20th, 21st, 26th, 27th, and 28th; foggy, 17th, and 22nd.
Parramatta—Southerly burster, 28th, and hot during month.
Sydney—Thunderstorms, 5th, 6th, 9th, 10th, 19th, 23rd, 25th, 27th, and 29th; stormy, 12th; dense fog, 16th; and S. gale, 19th.
Liverpool—Thunderstorms, 5th, 6th, 9th, 10th, 19th, 22n and 27th; foggy, 7th, and 8th.
Wentworth—Thunderstorms, 19th, 20th, 26th, 27th, 28th, a 29th; hot wind, 8th.
Cordeaux River—Thunderstorms, 6th, 7th, 10th, 11th, 20 and 27th.
Young—Thunderstorms, 21st and 22nd.
Wollongong—Heavy rain, 22nd; foggy, 23rd, and hazy, 26
Moss Vale—Thunderstorms, 5th, 9th, 10th, 21st, 27th, a 28th; very cold, 13th.
Goulburn—Thunderstorms, 4th, 5th, 9th, 10th, 20th, 23 25th, 27th, and 28th.
Terrara—Thunderstorms, 5th, 10th, 20th, and 27th.
Cape St. George—Thunderstorms, 11th, 12th, 28th, and 29t foggy, 9th, 23rd, 24th, and 25th.
Queanbeyan—Thunderstorms, 4th, 5th, 6th, 7th, 22nd, 26 27th, and 28th.
Urana—Thunderstorms, 2nd and 19th, and sultry duri month.
Deniliquin—Thunderstorms, 2nd, 19th, 25th, and 26th; co 12th; N. gale, 19th.
Kiandra—Thunderstorms, 2nd, 3rd, 4th, 5th, 6th, 23rd, 24 25th, 26th, 27th, and 28th, and shock of earthquake, 17
Cooma—Thunderstorms, 1st, 2nd, 4th, 5th, 6th, 25th, 26 27th, and 28th; shock of earthquake, 17th.
Albury—Thunderstorms, 2nd, 4th, 5th, 19th, 26th, 27th, a 28th; observations for part of month only.
Eden—Thunderstorms, 9th, and 28th; foggy, 7th, 20th, 24 and 27th.

# METEOROLOGICAL CURVES




*The dark vertical lines represent Force of Wind & Rain.*

Lithographed at the Surveyor Generals Office Sydney.

*Dew on the 1st 8th and 16th* — *Force of Wind on the 21st 3.1 lbs.*

# METEOROLOGICAL OBSERVATIONS

MADE AT THE

# GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

# ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

# MONTH OF DECEMBER, 1872;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1873.

[*Price, 6d.*] 3u 4—73

# METEOROLOGICAL OBSERVATIONS.

## GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s

Magnetic Variation 9° 34′ 2″ East.

### DECEMBER, 1872.

### GENERAL ABSTRACT.

| | | | |
|---|---|---|---|
| **BAROMETER** .. At 32° Fah. | Highest Reading ... | 30·100 | ... On the 11th, at 10 a.m. |
| | Lowest Reading ... | 29·349 | ... On the 15th, at 5 p.m. |
| | Mean Height ... | 29·722 | |

(Being 0·043 less than that in the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **WIND** .. .. | Greatest Pressure... | 10·1 lbs. | ... On the 29th. |
| | Mean Pressure ... | 0·7 lb. | |
| | Number of Days Calm ... | 0 | |
| | Prevailing Direction ... | S. | |

(Prevailing direction during the same month for the preceding 13 years N.E.)

| | | | |
|---|---|---|---|
| **TEMPERATURE** | Highest in the Shade ... | 86·1 | ... On the 9th. |
| | Lowest in the Shade ... | 57·5 | ... On the 30th. |
| | Greatest Range ... ... | 23·2 | ... On the 19th. |
| | Highest in the Sun ... | 125·8 | ... On the 20th. |
| | Highest in a Black Box with Glass Top ... ... | 237·2 | ... On the 19th. |
| | Lowest on the Grass ... | 51·2 | ... On the 23rd. |
| | Mean Diurnal Range ... | 12·3 | |
| | Mean in the Shade ... | 70·3 | |

(Being 1·3 greater than that of the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **HUMIDITY** .. | Greatest Amount... ... | 100·0 | ... On the 4th. |
| | Least ... ... ... | 44·0 | ... On the 17th. |
| | Mean ... ... ... | 72·9 | |

(Being 2·1 greater than that of the same month on an average of the preceding 13 years.)

| | | | |
|---|---|---|---|
| **RAIN** .. .. | Greatest Fall ... ... | 0·860 inch. | On the 16th. |
| | Number of Days ... ... | 13 rain and 2 dew. | |
| | Total Fall ... ... | 2·577 inches. | 65 ft. above the ground. |
| | | 3·523 inches. | 15 inches above the ground. |

(Being 1·331 inch greater than that of the same month on an average of the preceding 13 years.)

| | | |
|---|---|---|
| **EVAPORATION** | Total Amount ... ... | 5·499 inches. |
| **OZONE** .. .. | Mean Amount ... ... | 5·1 |

(Being 0·8 greater than that in the same month on an average of the preceding 12 years.)

| | | |
|---|---|---|
| **ELECTRICITY** .. | Number of Days Lightning | 6 |
| **CLOUDY SKY** .. | Mean Amount ... ... | 7·1 |
| | Number of Clear Days ... | 1 |
| **METEORS** .. | Number Observed ... | 6 |

#### REMARKS.

The weather during the month was remarkably cloudy and wet all over the Colony, except the far South-western Districts. The rainfall at the Stations varied from ½ to 10½ inches; in the Northern and Coast Districts generally it was very heavy, and at Sydney 1·331 inch above the average for the month. The mean temperature, humidity, and sun temperature were also high; on the 18th the black box thermometer reading to 234½ degrees, burst, and was replaced by a standard which next day read 237·2. On the 13th there was a flood in Cunningham's Creek, and three laden waggons washed away and one man drowned. On the 16th there were floods in the Macquarie and creeks about Bathurst; much damage to crops, and mails delayed. On the 21st, a sudden flood came upon the Town of Inverell, which was submerged; the inhabitants took refuge on the highland near it; farmers lost a great deal. At Mudgee a flood occurred on the 29th, after a thunderstorm which lasted all the 28th and 29th; during the two days 4½ inches of rain fell. During the month, 98 thunderstorms were recorded, several of those near the end of it being very severe. On the 28th, at Goulburn, 25 flashes of lightning were counted in one minute, and the connections in the Telegraph Office were fused. On the 29th, at Maitland, during the afternoon, dark heavy clouds seemed to be collecting over the town, from all points, and about 4 p.m. the darkness became so great that fowls went to roost; at 4·30 p.m. the storm broke with wind and rain from S.E., followed by terrific hail, which broke nearly all the windows in its way, pierced iron covered houses, and destroyed crops, in some cases totally; after the worst of the storm a piece of ice was picked up in the street gutter which turned the scale easily at 3 lbs.; another piece was seen to fall and break into 3 pieces, each as large as the observer's fist; as the storm passed to the east the wind veered round the compass; about Raymond Terrace and the Williams River great damage was done, and one piece of ice, 7 inches long and 2 inches thick was picked up; in another place 20 acres of corn was beaten down, and not a stalk left.

## SYDNEY, DECEMBER, 1872.

| Date. | Moon's Phases. | Standard Barometer at 9 a.m., corrected to Mean Sea Level. | Wind. | | Temperature. | | | | | | | | | Humidity. 0–100. | Rain. Inches. | Cl Cl T a & |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Dry. | Wet. | Shade. | | | | Sun. | Grass. | Sea Water. | | | |
| | | | Prevailing Direction. | Total Velocity. Miles. | Mean 9.3.9. | Mean 9.3.9. | Max. | Min. | Range | Mean. | Max. | Min. | 9 a.m. | Mean 9.3.9. | | |
| 1 | New Moon | 30·048 | S. | 345 | 68·7 | 66·7 | 72·7 | 67·0 | 5·7 | 69·9 | 104·8 | 61·7 | 68·7 | 88·0 | ·0 | 1 |
| 2 | | ·110 | S. | 399 | 64·0 | 59·0 | 66·1 | 59·9 | 6·2 | 63·0 | 84·8 | 55·4 | ... | 72·0 | 0·069 | 1 |
| 3 | G.S.Dec. Perigee | ·130 | E.S.E. | 260 | 62·3 | 59·8 | 66·0 | 59·8 | 6·2 | 62·9 | 84·9 | 55·4 | 67·6 | 84·3 | ·0 | 1 |
| 4 | | ·020 | E. | 165 | 63·1 | 62·8 | 66·8 | 60·3 | 6·5 | 63·6 | 76·0 | 55·7 | 67·4 | 98·0 | 0·641 | 1 |
| 5 | | 29·989 | N.E. | 140 | 65·4 | 65·0 | 71·1 | 62·8 | 8·3 | 67·0 | 93·5 | 59·1 | 67·8 | 97·0 | 0·616 | 1 |
| 6 | | ·986 | N.E. | 153 | 70·5 | 68·5 | 76·2 | 63·7 | 12·5 | 70·0 | 121·3 | 56·1 | 68·2 | 88·7 | 0·359 | |
| 7 | First Qr. | ·920 | N.N.E. | 243 | 75·9 | 70·3 | 79·7 | 65·9 | 13·8 | 72·8 | 118·4 | 58·4 | 68·0 | 72·0 | 0·002 | |
| 8 | | ·906 | E.S.E. | 144 | 77·5 | 71·5 | 77·6 | 66·7 | 10·9 | 72·2 | 111·3 | 60·1 | 68·2 | 70·0 | 0·110 | |
| 9 | In Equat. | ·878 | S. | 243 | 74·7 | 70·3 | 86·1 | 67·7 | 18·4 | 76·9 | 119·2 | 62·2 | 69·0 | 77·7 | 0·003 | 1 |
| 10 | | 30·072 | S.E. | 325 | 66·4 | 64·0 | 72·2 | 63·6 | 8·6 | 67·9 | 104·3 | 59·9 | 69·2 | 86·0 | 0·275 | |
| 11 | | ·261 | E. | 239 | 69·0 | 62·8 | 75·9 | 64·6 | 11·3 | 70·3 | 119·9 | 56·8 | 69·0 | 68·0 | 0·071 | 1 |
| 12 | | ·166 | N. | 306 | 72·1 | 66·0 | 75·6 | 65·4 | 10·2 | 70·5 | 117·0 | 60·1 | 69·4 | 69·3 | ·0 | 1 |
| 13 | | 29·934 | N. | 200 | 71·6 | 68·5 | 76·5 | 65·1 | 11·4 | 70·8 | 116·3 | 60·2 | 70·0 | 83·3 | 0·004 | 1 |
| 14 | | ·825 | N.N.E. | 267 | 72·5 | 69·5 | 78·8 | 65·6 | 13·2 | 72·2 | 120·5 | 60·7 | 70·6 | 83·7 | 0·120 | |
| 15 | Full Moon | ·666 | N.E. | 252 | 71·0 | 68·0 | 73·6 | 67·7 | 5·9 | 70·6 | 101·6 | 62·1 | 70·4 | 83·0 | ·0 | 1 |
| 16 | G. N. Dec. | ·705 | E.N.E. | 207 | 69·4 | 65·3 | 76·3 | 63·0 | 13·3 | 69·7 | 113·8 | 59·4 | 70·6 | 77·7 | 0·860 | |
| 17 | | ·704 | W.N.W. | 325 | 77·7 | 66·8 | 85·3 | 64·3 | 21·0 | 74·8 | 119·0 | 57·3 | 70·8 | 53·7 | ·0 | |
| 18 | | ·608 | E. | 205 | 74·8 | 64·8 | 84·2 | 67·4 | 16·8 | 75·8 | 125·0 | 55·8 | 71·2 | 56·3 | ·0 | |
| 19 | Apogee | ·712 | N.E. | 324 | 75·7 | 64·0 | 84·5 | 61·3 | 23·2 | 72·9 | 123·9 | 54·4 | 71·0 | 49·7 | 0·002 | |
| 20 | | ·809 | N.E. | 351 | 74·7 | 70·6 | 81·4 | 64·7 | 16·7 | 73·1 | 125·8 | 60·1 | 71·2 | 79·3 | ·0 | |
| 21 | | ·533 | S. | 389 | 75·7 | 68·1 | 81·6 | 69·1 | 12·5 | 75·4 | 116·0 | 64·1 | 71·4 | 64·3 | ·0 | |
| 22 | | ·758 | S.W. | 488 | 64·5 | 58·0 | 67·2 | 63·2 | 4·0 | 65·2 | 101·8 | 58·3 | 71·0 | 65·0 | ·0 | |
| 23 | Last Qr. | ·827 | W. | 213 | 67·0 | 59·1 | 73·5 | 58·1 | 15·4 | 65·8 | 111·3 | 51·2 | 71·2 | 60·7 | ·0 | |
| 24 | In Equat. | ·781 | W.N.W. | 206 | 71·5 | 62·3 | 79·3 | 57·9 | 21·4 | 68·6 | 121·1 | 48·1 | 71·0 | 57·7 | ·0 | |
| 25 | | ·919 | N. | 287 | 75·6 | 68·5 | 81·6 | 60·7 | 20·9 | 71·2 | 119·2 | 54·1 | 71·4 | 66·0 | ·0 | |
| 26 | | ·906 | S.E. | 308 | 76·3 | 67·8 | 82·9 | 65 6 | 17·3 | 74·3 | 120·0 | 54·7 | 71·2 | 61·7 | ·0 | |
| 27 | | 30·067 | N.E. | 296 | 75·2 | 70·5 | 79·3 | 69·2 | 10·1 | 74·3 | 121·6 | 64·1 | 71·6 | 76·3 | ·0 | |
| 28 | | 29·947 | N.N.E. | 317 | 74·7 | 71·2 | 81·1 | 71·1 | 10·0 | 76·1 | 120·3 | 67·1 | 72·0 | 81·3 | ·0 | |
| 29 | | ·722 | S.S.W. | 456 | 75·9 | 68·5 | 73·3 | 69·6 | 3·7 | 71·5 | 106·4 | 64·5 | 72·2 | 65·0 | 0·004 | |
| 30 | New Moon G. S. Dec. | ·946 | S. | 335 | 64·6 | 57·6 | 70·6 | 57·5 | 13·1 | 64·1 | 108·0 | 52·9 | 72·0 | 63·7 | 0·387 | |
| 31 | | 30·122 | E.N.E. | 205 | 68·1 | 60·0 | 73·0 | 59·0 | 14·0 | 66·0 | 117·1 | 53·6 | 72·4 | 60·0 | ·0 | |
| | | | | | | | | | | | | | | | Sum. | |
| Means | ..... | 29·902 | S. | 8593 | 71·2 | 65·7 | 76·5 | 64·1 | 12·3 | 70·3 | 111·7 | 58·2 | 70·2 | 72·9 | 3·523 | |

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.

The Barometer at 9 a.m. reads 0·030 above the true mean for the day.

Dew 7th, and 19th.

## SYDNEY, DECEMBER, 1872.

| Date. | Evaporation. Inches. | Ozone, 0-10. Day. | Night. | Mean. | Remarks. |
|---|---|---|---|---|---|
| 1 | 0·089 | ... | ... | 3·8 | 1.—Cloudy and very dull. Light rain in forenoon from 10·35 a.m., and again in the evening from 6·45 p.m. until about 8 p.m. |
| 2 | ... | 4·5 | 5·0 | 4·8 | 2.—Cloudy, dull, and strong breeze. Very light rain at 1 p.m., and at intervals until evening. |
| 3 | 0·027 | 5·5 | 8·5 | 7·0 | 3.—Cloudy. Light rain at intervals during day. Heavy shower at 1·56 p.m. |
| 4 | ... | 8·0 | 7·0 | 7·5 | 4.—Cloudy. Raining at intervals during morning, after that it rained steadily. |
| 5 | 0·074 | 8·0 | 5·0 | 6·5 | 5.—Cloudy. Steady rain all forenoon, and at intervals during afternoon and evening. Fine at 10·30 p.m. Four meteors observed, three small ones and one as large as Sirius, which passed that star to N.E. at 8h. 44m. 30s. p.m. with train of sparks. |
| 6 | 0·121 | 5·5 | 5·0 | 5·3 | 6.—Cloudy and very warm, partial clearing at intervals, final clearing at 9 p.m. Heavy dew falling in the evening. |
| 7 | 0·266 | 3·5 | 8·0 | 5·8 | 7.—Fine and very hot until evening. Thunderstorm from S.W. 8 21 p.m. Rain, 8·26 p.m. Lightning very vivid from N. round by W., and S. to S.E.; began 7·27 p.m. Electrometer 0 to 90. |
| 8 | 0·173 | ... | ... | 3·8 | 8.—Cloudy from 10 a.m. until evening. Lightning, N.N.E., all evening. |
| 9 | 0·163 | 6·5 | 7·0 | 6·8 | 9.—Cloudy, very dull, and warm. Thunderstorm, from W., from 4·15 p.m. until 5·50 p.m. Heavy showers during storm, commencing 4·35 p.m. Lightning, N., during evening. |
| 10 | 0·079 | 6·5 | 5·0 | 5·8 | 10.—Cloudy and very dull, began to clear after 8·30 p.m. Fine at 10 p.m. Lunar halo at 9·7 p.m. |
| 11 | 0·136 | 4·0 | 6·0 | 5·0 | 11.—Cloudy and very dull. Very light rain at 2·45 p.m. |
| 12 | 0·220 | 4·0 | 6·5 | 5·3 | 12.—Cloudy and dull; also fresh breeze. |
| 13 | 0·118 | 5·5 | 6·5 | 6·0 | 13.—Cloudy, dull, and warm. Thunderstorm, W.S.W., from 2·55 p.m. until 5·24 p.m. Raining from 3·37 p.m. until 7 p.m. Storm passed over to Coast. |
| 14 | 0·164 | 5·0 | 7·5 | 6·3 | 14.—Cloudy and dull until 8 p.m., and very warm. Meteor observed, from S.E. to N.W., at 7·53 p.m. |
| 15 | 0·034 | ... | ... | 4·5 | 15.—Cloudy Showers, between 9·32 a.m. and 10 a.m. Thunder, 11·47 a.m., and dropping rain. Thunder again, 1·30 p.m. Steady rain all afternoon. |
| 16 | 0·134 | 3·0 | 6·5 | 4·8 | 16.—Cloudy and dull. |
| 17 | 0·326 | 3·0 | 3·5 | 3·3 | 17.—Very hot. Forenoon cloudy and fine alternately. Afternoon cloudy. No clouds visible in evening. Wind blowing, from N.W., at 3 30 p.m. At the Heads the wind was N.E. |
| 18 | 0·282 | 3·0 | 5·5 | 4·3 | 18.—Fine and very hot. No clouds during afternoon and evening. |
| 19 | 0·326 | 3·0 | 6·0 | 4·5 | 19.—Light clouds in the forenoon. After 1 p.m. fine. Very hot. |
| 20 | 0·218 | 8·0 | 5·5 | 6·8 | 20.—Light clouds all forenoon. Afternoon and evening dull; like thunderstorm. Lightning, S., at 8·10 p.m. |
| 21 | 0·246 | 5·0 | 6·5 | 5·8 | 21.—Cloudy, dull, and very hot; like thunderstorm at 9 a.m. Strong S. breeze in the evening. |
| 22 | 0·190 | ... | ... | 3·0 | 22.—Fine about 8·30 p.m. Light rain at 9·33 a.m., and again dropping rain at 8·45 p.m. |
| 23 | 0·254 | 4·0 | 5·0 | 4·5 | 23.—Cloudy from 10 a.m, until noon. Fresh cool breeze until evening. Light dew in the evening. |
| 24 | 0·236 | 4·0 | 5·5 | 4·8 | 24.—Cloudy from about 10 a.m. until 5 p.m. Very warm. |
| 25 | 0·288 | ... | ... | 2·8 | 25.—Fine and very warm during day. |
| 26 | 0·298 | 4·5 | 5·0 | 4·8 | 26.—Cloudy after 3·45 p.m. Dropping rain from 8·34 p.m. until 9 p.m., when a light shower fell, Forenoon very hot. |
| 27 | 0·268 | 5·0 | 6·5 | 5·8 | 27.—Fine from about 4 p.m. until 5·45 p.m. Very hot. |
| 28 | 0·184 | 4·5 | 5·0 | 4·8 | 28.—Fine after 8·30 p.m. Dull all day. Drops of rain at 5·5 p.m. and 6·57 p.m. Thunder, N.W., at 3 p.m. and passed over to N.E. Lightning, N. and W.S.W., during evening. Meteor observed, E. to N.E., at 10·1 p.m. |
| 29 | 0·065 | ... | ... | 5·0 | 29.—Cloudy. Dropping rain, 7·28 a.m. and 11·42 a.m. Thunderstorm from 2·30 p.m. until 5·25 p.m. Lightning, 3·10 p.m. and all round during evening. Rained all the afternoon, and at intervals during the evening. Electrometer 0 to 90 during storm. |
| 30 | 0·304 | 3·5 | 3·0 | 3·3 | 30.—Fine after 10 a.m. Strong cool breeze until evening. |
| 31 | 0·216 | 4·0 | 4·5 | 4·3 | 31.—Cloudy from 11 a.m. until after 4 p.m. Evening clear, no clouds visible. |
| | Sum. | | | | |
| Means | 5·499 | 4·8 | 5·8 | 5·1 | |

Cloudy Sky, taken at 9 a.m., 3 p.m., and 9 p.m.

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.

Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

| Date. | Self-registering Barometer at 32°. | | | | | Self-registering Anemometer. | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mean. | Max. | Hour. | Min. | Hour. | S. | S.S.W. | S.W. | W.S.W. | W. | W.N.W. | N.W. | N.N.W. | N. | N.N.E. | N.E. | E.N.E. | E. | E.S.E. | S.E. | S.S.E. | Velocity. Total. Miles. | Velocity. Mean. pr. hr. | Mean Pressure. lbs. | Greatest Pressure. Direction of Wind. Time. |
| 1 | 29·998 | 30·040 | 8 a.m. | 29·902 | 4 p.m. | 18 | 4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 345 | 14·4 | 1·0 | 7·2 S. 1·35 a.m. |
| 2 | 29·954 | 30·050 | 9 a.m. | 29·922 | 4 a.m. | 19 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 3 | 399 | 16·6 | 1·4 | 5·8 S. 10·40 a.m. |
| 3 | 29·892 | 29·947 | 10 a.m. | 29·834 | 4 a.m. | 3 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 3 | 2 | 7 | 4 | 2 | 260 | 10·8 | 0·6 | 3·4 E.S.E. 6·12 a.m. |
| 4 | 29·813 | 29·859 | 9 a.m. | 29·785 | 2 & 3 a.m. | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 5 | 2 | 4 | 7 | 1 | 3 | ... | 165 | 6·9 | 0·2 | 1·8 E.N.E. 6·33 p.m. |
| 5 | 29·808 | 29·835 | 10 p.m. | 29·775 | 5 p.m. | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | 17 | 4 | 1 | ... | ... | ... | 140 | 5·8 | 0·2 | 1·6 N.E. 4·55 p.m. |
| 6 | 29·780 | 29·820 | 9 a.m. | 29·752 | 3 a.m. | ... | ... | ... | ... | ... | ... | 1 | 2 | ... | 11 | 8 | 2 | ... | ... | ... | ... | 153 | 6·4 | 0·2 | 0·7 E.N.E. 3· 5 p.m. |
| 7 | 29·730 | 29·826 | 10 p.m. | 29·639 | 5 p.m. | ... | 2 | ... | ... | 1 | ... | ... | ... | 4 | 6 | 3 | 4 | 4 | ... | ... | ... | 243 | 10·1 | 0·5 | 3·6 S.W. 8·45 p.m. |
| 8 | 29·713 | 29·757 | 10 a.m. | 29·674 | 2,3,& 4 a.m. | 4 | 1 | ... | 1 | ... | 6 | ... | ... | ... | ... | ... | ... | 1 | 6 | 2 | 3 | 144 | 6·0 | 0·2 | 1·4 S.S.W. 10·32 a.m. |
| 9 | 29·776 | 29·886 | 8 a.m. | 29·684 | 3 p.m. | 6 | 5 | 1 | 1 | 1 | 2 | ... | ... | ... | ... | 1 | 2 | ... | 2 | 1 | 2 | 243 | 10·1 | 0·5 | 2·6 S.S.W. 7·12 a.m. |
| 10 | 29·981 | 30·090 | 7 a.m. | 29·893 | 4 p.m. | 8 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 12 | ... | 325 | 13·5 | 0·9 | 2·9 S. 2·18 p.m. |
| 11 | 30·040 | 30·100 | 10 a.m. | 29·975 | 4 a.m. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | 13 | 6 | 2 | ... | 239 | 10·0 | 0·5 | 1·4 E. 7·45 p.m. |
| 12 | 29·862 | 30·014 | 9 a.m. | 29·758 | 3 a.m. | ... | ... | ... | ... | ... | ... | ... | ... | 9 | 8 | 5 | 2 | ... | ... | ... | ... | 306 | 12·8 | 0·8 | 3·6 N.E. 3·45 p.m. |
| 13 | 29·663 | 29·773 | 10 a.m. | 29·582 | 2 a.m. | ... | ... | ... | ... | ... | 4 | 3 | 1 | 6 | 4 | 3 | 3 | ... | ... | ... | ... | 200 | 8·3 | 0·4 | 2·2 E.N.E. 1· 5 p.m. |
| 14 | 29·582 | 29·680 | 4 p.m. | 29·500 | 6 & 8 a.m. | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | 9 | 7 | ... | 4 | ... | ... | 1 | 267 | 11·1 | 0·6 | 2·9 N.E. 6·48 p.m. |
| 15 | 29·429 | 29·513 | 8 a.m. | 29·349 | 5 p.m. | 2 | 3 | ... | 3 | 4 | 2 | 1 | ... | ... | 2 | 6 | 1 | ... | ... | ... | ... | 252 | 10·5 | 0·6 | 4·2 S. 6· 0 p.m. |
| 16 | 29·557 | 29·596 | 10 p.m. | 29·531 | 3 p.m. | 3 | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 10 | 4 | 3 | 3 | ... | 207 | 8·6 | 0·4 | 1·3 S.S.E. 1·37 p.m. |
| 17 | ..... | ..... | ..... | ..... | ..... | ... | ... | 1 | 3 | 1 | 7 | 2 | 1 | 4 | ... | 2 | 3 | ... | ... | ... | ... | 325 | 13·5 | 0·9 | 3·6 N.E. 1·30 p.m. |
| 18 | 29·472 | 29·527 | 7 a.m. | 29·412 | 2 p.m. | ... | ... | ... | 2 | 2 | ... | 2 | 3 | 1 | 2 | 5 | 2 | 5 | ... | ... | ... | 205 | 8·5 | 0·4 | 1·3 E. 4·30 p.m. |
| 19 | 29·564 | 29·653 | 6 a.m. | 29·492 | 4 p.m. | 5 | ... | ... | ... | 4 | 2 | 2 | ... | ... | 2 | 5 | 2 | 2 | ... | ... | ... | 324 | 13·5 | 0·9 | 2·9 N.E. 7·25 p.m. |
| 20 | 29·507 | 29·645 | 9 a.m. | 29·430 | 12 p.m. | 3 | ... | 1 | ... | 2 | ... | ... | ... | 4 | 4 | 5 | 2 | 3 | ... | ... | ... | 351 | 14·6 | 1·1 | 7·2 N.E. 6·25 p.m. |
| 21 | 29·460 | 29·574 | 8 a.m. | 29·364 | 9 a.m. | 11 | 2 | ... | 1 | ... | ... | 1 | 1 | ... | ... | ... | ... | 3 | 5 | ... | ... | 389 | 16·2 | 1·3 | 5·1 S. 8·30 a.m. |
| 22 | 29·619 | 29·677 | 9 p.m. | 29·579 | 9 a.m. | 2 | 5 | 7 | 5 | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 488 | 20·3 | 2·1 | 5·4 S.S.W. 1·30 p.m. |
| 23 | 29·610 | 29·654 | 9 a.m. | 29·580 | 4 & 5 p.m. | 4 | 1 | ... | 2 | 6 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | 4 | 4 | 213 | 8·9 | 0·4 | 2·6 S. 11·18 a.m. |
| 24 | 29·685 | 29·770 | 7 & 8 a.m. | 29·600 | 1,2,& 4 p.m. | 3 | ... | 1 | 3 | 3 | 6 | ... | ... | ... | ... | ... | ... | 1 | 4 | 1 | 2 | 206 | 8·6 | 0·4 | 2·0 S.W. 10·12 a.m. |
| 25 | 29·652 | 29·750 | 9 a.m. | 29·593 | 4 & 5 p.m. | ... | ... | ... | 1 | ... | 3 | ... | ... | 8 | 5 | 5 | 2 | ... | ... | ... | ... | 287 | 12·0 | 0·7 | 7·2 N.E. 4·42 p.m. |
| 26 | 29·839 | 29·998 | 11 p.m. | 29·735 | 11 & 12 a.m. | 1 | .. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 6 | 5 | 9 | 3 | 308 | 12·8 | 0·8 | 2·9 S.E. 3·25 p.m. |
| 27 | 29·811 | 29·908 | 9 a.m. | 29·773 | 3 a.m. | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | 15 | 6 | 1 | ... | ... | ... | 296 | 12·3 | 0·8 | 3·1 N.E. 4·42 p.m. |
| 28 | 29·695 | 29·787 | 9 a.m. | 29·632 | 5 p.m. | ... | ... | ... | ... | ... | ... | 3 | ... | 4 | 8 | 3 | 2 | 4 | ... | ... | ... | 317 | 13·2 | 0·9 | 6·5 N.N.E. 5·50 p.m. |
| 29 | 29·573 | 29·764 | 8 a.m. | 29·444 | 4 p.m. | 4 | 5 | ... | 3 | ... | 3 | ... | 2 | 4 | 1 | 2 | ... | ... | ... | ... | ... | 456 | 19·0 | 1·8 | 10·1 S. 2·27 a.m. |
| 30 | 29·881 | 29·968 | 8 a.m. | 29·789 | 10 a.m. | 9 | 2 | ... | 2 | 7 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4 | 335 | 14·0 | 1·0 | 3·6 S.S.W. 10·45 a.m. |
| 31 | 29·850 | 29·962 | 9 a.m. | 29·730 | 7 a.m. | 3 | ... | ... | ... | ... | ... | ... | ... | 2 | 5 | 1 | 6 | 3 | 3 | 1 | ... | 205 | 8·5 | 0·4 | 1·0 S.E. 1·17 p.m. |
| Sums or Means. | 29·722 | Dec. 11th. 30·100 | 10 a.m. | Dec. 15th. 29·349 | 5 p.m. | 110 | 34 | 11 | 27 | 36 | 38 | 14 | 9 | 52 | 64 | 100 | 69 | 66 | 44 | 44 | 26 | Sum 8593 | Mean. 11·5 | Mean. 0·7 | |

self-registering Barometer is worked by electricity, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour.

# ABSTRACT FROM METEOROLOGICAL STATIONS,

## For the Month of DECEMBER, 1872.

| Stations. | Least Distance from East Coast in miles. | Height above sea in feet. | Mean of Observations taken at 9 a.m., December, 1872. | | | | | | Temperature in Shade. | | | | For 24h. previous to 9 a.m. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Barometer. | Temperature in Shade. | Humidity 0 to 100. | Wind. | | Clouds 0-10. | | | | | Rain. | | | | Evaporation in inches. |
| | | | | | | Direction | Force. 0-6 | | Mean. Max. | Mean. Min. | Extreme Max. | Extreme Min. | Total Fall, inches. | No. of Days | Greatest Fall, inches. | Date | |
| Tenterfield ... | 80 | ... | ... | ... | ... | E. | 1·8 | 4·8 | 85·1 | ... | 98·1 | ... | 3·840 | 13 | 0·660 | 1 &2 | 1·640 |
| Grafton ..... | 22 | ... | ... | 74·8 | ... | S.E. | 0·2 | 6·1 | 85·2 | 64·3 | 99·2 | 52·2 | 4·735 | 18 | 0·630 | 5 | 5·805 |
| Bourke ..... | 393 | ... | ... | 77·4 | ... | S. | 0·0 | 1·2 | 89·0 | 65·7 | 115·4 | 54·9 | 4·090 | 10 | 1·000 | 29 | ... |
| Narrabri ..... | 196 | ... | ... | 80·3 | ... | N.W. | 1·0 | 2·0 | 93·7 | 66·9 | 103·1 | 55·5 | 3·690 | 10 | 1·020 | 5 | 8·816 |
| Armidale..... | 80 | 3278 | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Port Macquarie | 0 | ... | ... | 71·4 | ... | N.E. | 1·5 | 4·9 | 77·9 | 64·9 | 89·3 | 55·6 | 6·540 | 13 | 1·180 | 5 | 7·765 |
| Murrurundi ... | 94 | 1545 | ... | 70·6 | ... | W. | 0·8 | 5·9 | 80·7 | 60·4 | 94·1 | 51·3 | 4·483 | 11 | 0·940 | 29 | ... |
| Cassilis ..... | 120 | ... | ... | 73·2 | ... | S. | 1·0 | 2·7 | 85·1 | 61·2 | 100·1 | 47·2 | 6·200 | 11 | 1·750 | 29 | 6·148 |
| Muswellbrook.. | 68 | ... | ... | 76·3 | ... | S. & W. | 2·1 | ... | 90·2 | 62·3 | 105·5 | 48·3 | 3·580 | 8 | 0·930 | 23 | 5·921 |
| Dubbo ..... | 182 | ... | ... | 73·0 | ... | N.E. | 0·5 | ... | 83·4 | 62·5 | 94·9 | 56·9 | 6·410 | 9 | 2·080 | 4 | 8·688 |
| Mudgee ..... | 121 | 1500 | ... | 70·6 | ... | E. | 0·5 | ... | 81·1 | 60·1 | 92·4 | 50·0 | 10·540 | 7 | 4·680 | 30 | ... |
| Dalwood ..... | 27 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 5·600 | 9 | 1·910 | 30 | ... |
| West Maitland | 18 | ... | ... | 70·4 | ... | W. | 0·7 | 6·0 | 85·8 | 55·0 | 96·4 | 52·9 | 2·030 | 12 | 0·790 | 23 | 5·387 |
| Lambton ..... | 7 | ... | ... | 68·5 | ... | S. | 1·2 | ... | 79·6 | 57·4 | 95·3 | 50·0 | 6·290 | 15 | 0·930 | 16 | 4·918 |
| Newcastle ..... | 1 | 112 | 29·876 | 71·7 | 74·0 | N.W. | 0·2 | 4·2 | 79·7 | 63·7 | 94·3 | 51·8 | 4·080 | 14 | 1·200 | 30 | ... |
| Orange..... | 124 | 2891 | ... | 64·6 | ... | N. | 2·0 | ... | 74·3 | 54·9 | 86·3 | 46·3 | 5·790 | 14 | 1·970 | 16 | 6·998 |
| Bathurst ..... | 96 | 2200 | 29·859 | 67·1 | 77·0 | W. | 1·3 | 4·7 | 81·6 | 52·5 | 92·5 | 41·0 | 5·110 | 8 | 2·210 | 16 | ... |
| Kurrajong ..... | 36 | 1870 | ... | 61·6 | ... | E. | ... | ... | 68·4 | 54·7 | 81·0 | 46·0 | 8·100 | 15 | 1·900 | 4 | ... |
| Mount Victoria | 61 | 3490 | 29·876 | 63·1 | 72·0 | W. | 0·1 | 5·5 | 74·1 | 52·0 | 88·1 | 41·9 | 6·480 | 15 | 1·600 | 5 | 8·862 |
| Woodford ..... | 50 | 2192 | 29·899 | 65·3 | ... | W. | 0·0 | ... | 70·7 | 59·9 | 82·5 | 51·4 | 9·150 | 17 | 2·300 | 5 | ... |
| Parramatta..... | 16 | ... | ... | 71·2 | ... | S.W. | 1·3 | 6·1 | 84·6 | 57·8 | 96·9 | 47·3 | 4·000 | 10 | 1·250 | 16 | ... |
| Sydney..... | 5 | 155 | 29·902 | 70·3 | 72·9 | S. | 0·7 | 7·1 | 76·5 | 64·1 | 86·1 | 57·5 | 3·523 | 13 | 0·860 | 16 | 5·499 |
| Liverpool..... | 16 | ... | 29·880 | 70·4 | ... | S. | 0·5 | 3·3 | 79·7 | 61·1 | 94·0 | 52·0 | 5·045 | 13 | 1·440 | 16 | ... |
| Wentworth..... | 476 | ... | ... | 73·2 | ... | S.W. | 2·3 | 3·7 | 86·7 | 59·6 | 103·3 | 49·5 | 0·400 | 3 | 0·290 | 21 | 11·127 |
| Wilton ..... | 13 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 4·280 | 8 | 2·050 | 5 | ... |
| Cordeaux River | 6 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 7·330 | 13 | 1·610 | 5 | ... |
| Young ..... | 140 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Wollongong ... | 0 | ... | ... | 67·6 | ... | S. | 1·7 | 6·2 | 75·6 | 59·6 | 84·4 | 39·7 | 5·600 | 7 | 1·800 | 5 | 6·601 |
| Moss Vale ..... | 31 | ... | ... | 65·4 | ... | N.W. | 1·2 | ... | 74·4 | 56·3 | 86·4 | 47·8 | 7·010 | 16 | 1·850 | 14 | ... |
| Goulburn..... | 54 | 2129 | 29·922 | 63·4 | 77·0 | N.W. | 0·1 | 4·6 | 83·7 | 43·1 | 105·6 | 33·8 | 2·280 | 10 | 0·930 | 16 | 4·325 |
| Terrara..... | 4 | ... | ... | ... | ... | ..... | ... | ... | ... | ... | ... | ... | 5·360 | 17 | 0·970 | 5 | ... |
| Wagga Wagga | 161 | ... | ... | 68·9 | ... | W. | 1·5 | ... | 79·6 | 58·4 | 97·1 | 49·9 | 2·110 | 7 | 0·580 | 13 | 6·645 |
| Cape St. George | 0 | 175 | 29·850 | 68·5 | 80·0 | S. | 1·7 | 6·6 | 76·4 | 60·5 | 85·2 | 54·6 | 4·030 | 13 | 0·980 | 5 | ... |
| Queanbeyan ... | 60 | ... | ... | 63·6 | ... | N.W. | 0·7 | ... | 72·1 | 55.0 | 85·2 | 45·1 | 3·160 | 8 | 0·930 | 30 | 4·808 |
| Urana ..... | 218 | ... | ... | 72·5 | ... | N.W. | 1·0 | 3·3 | 85·5 | 59·4 | 93·5 | 50·1 | 1·920 | 4 | 1·130 | 13 | 8·410 |
| Deniliquin ..... | 287 | 410 | 29·996 | 68·9 | 55·0 | S.W. | 1·8 | 2·5 | 87·1 | 50·6 | 99·3 | 36·2 | 0·620 | 2 | 0·440 | 21 | ... |
| Kiandra ..... | 88 | 4640 | 29·919 | 51·2 | 66·0 | N.W. | 0·9 | 5·1 | 64·3 | 38·0 | 74·5 | 26·6 | 5·740 | 13 | 1·200 | 12 | ... |
| Cooma ..... | 52 | 2637 | ... | 62·1 | ... | E. | 1·8 | 5·5 | 76·6 | 47·6 | 88·6 | 39·8 | 1·970 | 8 | 0·600 | 14 | 3·109 |
| Albury ..... | 175 | 572 | ... | 68·1 | 50·0 | N.W. | 1·1 | 3·6 | 82·5 | 53·7 | 93·4 | 41·3 | 4·520 | 6 | 1·860 | 13 | ... |
| Eden..... | 0 | 107 | 29·851 | 66·2 | 65·0 | S.W. | 1·2 | 5·6 | 73·7 | 58·6 | 82·0 | 52·1 | 3·220 | 13 | 1·630 | 30 | ... |

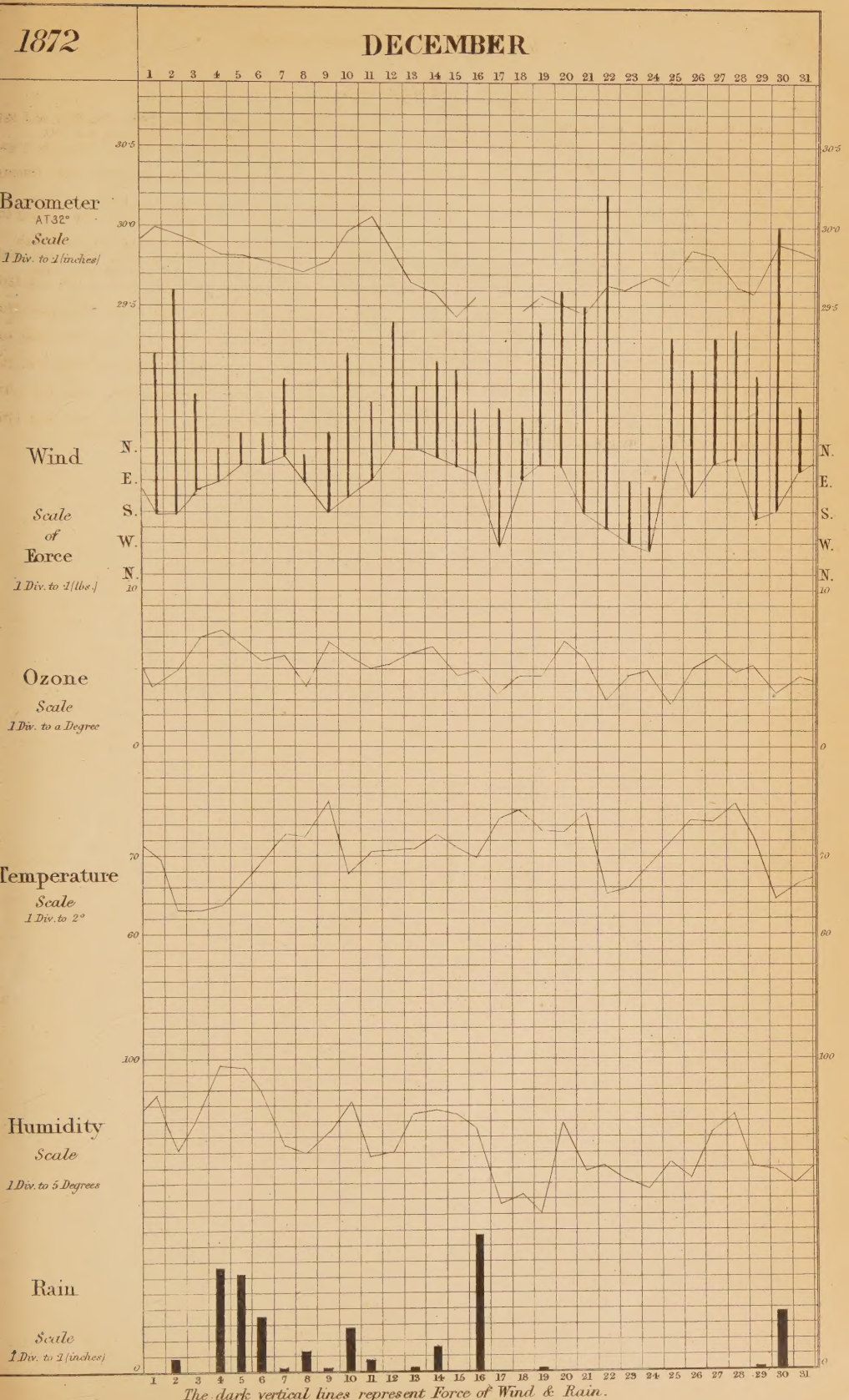
Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only twelve of the stations have barometers.

REMARKS.

## REMARKS.

Bourke—Thunderstorms, 1st, 2nd, 8th, 14th, and 28th.
Port Macquarie—Thunderstorms, 8th and 9th ; squally, 22nd, and sultry during month.
Cassilis—1·350 inches rain fell in one hour during a cyclone, 28th ; thunderstorms, 1st, 7th, 9th, 13th, 22nd, 27th, 28th, and 29th.
Muswellbrook—Thunderstorms, 4th, 9th, 13th, 15th, 28th, and 29th ; southerly-burster, 26th.
Dubbo—Stormy, 4th and 7th.
Mudgee—Very severe rain-storm, 30th.
West Maitland—Thunderstorm, 16th ; very severe gale, and thunderstorm, 29th, large blocks of hail falling ; wind upsetting rain gauge.
Lambton—Thunderstorms, 5th, 6th, 9th, 10th, 11th, and 13th ; southerly-burster, 7th.
Newcastle—Stormy, 2nd, 22nd, and 30th ; and thunderstorm, 29th.
Orange—Thunderstorms, 7th, 9th, 12th, 14th, 15th, 28th, and 29th.
Kurrajong—Thunderstorms, 1st, 6th, 7th, 9th, 13th, 28th, and 29th ; and squally, 10th.
Mount Victoria—Thunderstorms, 1st, 13th, 14th, 15th, 22nd, 28th, and 29th ; and foggy during month.
Parramatta—Severe lighting with heavy rain, 7th.
Sydney—Thunderstorms, 7th, 9th, 13th, 15th, 20th, and 2
Liverpool—Thunderstorms, 7th, 15th, 28th, and 29th.
Wentworth—Thunderstorms, 7th, 12th, and 13th ; heavy g
18th ; and hot wind, 28th.
Moss Vale—Heavy thunderstorms, 7th, 13th, 14th ; thun
20th.
Goulburn—Thunderstorms, 1st, 7th, 13th, and 15th ; v
severe lightning, 25 flashes one minute, 28th ; fusing
nections.
Terrara—Thunderstorms, 7th, 13th, 20th, 28th, and 29th.
Cape St. George—Thunderstorms, 13th, 15th, and 3
southerly gales, 2nd and 31st ; and hot wind, 21st.
Queanbeyan—Thunderstorm, 17th ; stormy, 6th and 1
hot, 27th and 28th.
Urana—Thunderstorms, 12th, 13th, 14th, & 15th ; gale. 1
and hot wind, 25th.
Deniliquin—Thunderstorm, 12th ; S.W. gale, 25th ; and
warm, 13th.
Kiandra—Thunderstorms, 6th, 7th, 13th, and 28th ; Hail,
and foggy, 1st and 2nd.
Cooma—Thunderstorms, 6th, 13th, 16th, 17th, and 1
sultry, 6th and 15th.
Albury—Thunderstorms, 12th, 13th, 14th, 15th, and 1
squally, 3rd and 21st ; and hot wind, 7th.

# METEOROLOGICAL CURVES




*The dark vertical lines represent Force of Wind & Rain.*

Lithographed at the Surveyor Generals Office, Sydney.